

MODEL (1)

Choose the correct answer :

(1) If $x + 2 = -3$, then $x = \dots$ (-1 or 1 or 5 or -5)

(2) $3 - |-3| = \dots$ (0 or 1 or 3 or 6)

(3) If the lateral area of a cube is 36 cm^2 , then its total area = $\dots \text{ cm}^2$ (144 or 81 or 54 or 96)

(4) $5^2 \times 2^2 = \dots$ (5^4 or 2^4 or 10^2 or 10^4)

(5) $|-5| + 7 = \dots$ (2 or zero or 7 or 12)

(6) $\{(-1)^{\text{zero}}, (\text{zero})^2\} \subset \mathbb{Z}$ (\in \text{ or } \notin \text{ or } \subset \text{ or } \not\subset)

(7) The number that satisfies the inequality $x < -2$ is \dots (-3 or -2 or -1 or 0)

MODEL (2)

(1) $2^6 \times 2^2 \div 2^7 = \dots$ (2^8 or 2^{12} or 2^5 or 2)

(2) The equation : $2^6 + x^5 = 100$ is of the degree. (11th or 5th or 6th or 1st)

(3) $3^2 \times 3^3 = 3^{\dots}$ (5 or 3 or 2 or 1)

(4) The area of the circle whose radius length is $2\pi \text{ cm.}$ is $\dots \text{ cm}^2$ (4\pi or 2\pi^2 or 12.56 or 4\pi^3)

(5) The integer which satisfies the inequality : $y < -3$ is \dots (-2 or -8 or 0 or 1)

(6) If $3x = -9$, then $-5x = \dots$ (15 or 9 or -15 or -|-15|)

(7) The height of the cuboid whose lateral area is 160 cm^2 and the dimensions of its base are 3 cm. and 7 cm. equals $\dots \text{ cm.}$ (6 or 8 or 10 or 16)

MODEL (3)

(1) The number that satisfies the inequality $x > -4$ is

(-5 or -6 or -4 or -3)

(2) The number that satisfies the inequality : $x - 2 > 3$ is

(3) $(-100)^{\text{zero}} = \dots$ (3 or 4 or 5 or 6)
(-100 or 100 or zero or 1)

(4) The additive inverse of $(-5)^2$ is (25 or 5 or -5 or -25)

(5) If $x + 1 = 2$, then $x = \dots$ where $x \in \mathbb{N}$ (3 or 1 or -1 or -3)

(6) A cuboid with a square base, its lateral area is 224 cm^2 , its height is 14 cm.
, then the side length of its base is cm. (14 or 4 or 2 or 3)

(7) The equation : $x^3 + 1 = 10$ is of the degree.

(first or second or third or fourth)

MODEL (4)

(1) If $3x = -9$, $x \in \mathbb{Z}$, then $x + 1 = \dots$ (-3 or -2 or -1 or 4)

(2) The lateral area of the cube = area of one face $\times \dots$

(6 or 5 or 4 or 3)

(3) $(5)^{\text{zero}} = \dots$ (zero or 5 or 1 or 50)

(4) If $a < b$, then $-3a \dots -3b$ (< or > or = or \leq)

(5) $(-3) \times |-5| = \dots$ (15 or -15 or 8 or -8)

(6) $9^7 \div 9^5 = \dots$ (9^{-12} or 9^2 or 9^{zero} or 9^{35})

(7) A circle of diameter length 8 cm. , then its area = $\pi \text{ cm}^2$.

(4 or 8 or 16 or 64)

MODEL (5)

Choose the correct answer :

(1) $(|-9| + 3) + 2$ \mathbb{Z} (\in or \notin or \subset or $\not\subset$)

(2) A cube the perimeter of its base is 36 cm. , then its lateral area = cm^2 (9 or 324 or 36 or 486)

(3) The number which satisfies the inequality : $x > -2$ is (1 or -4 or -3 or -2)

(4) $(-19)^0 + (19)^0$ = (-1 or zero or 1 or 2)

(5) $(-1)^{104} + (-1)^{103}$ = (0 or 2 or -1 or 1)

(6) $3^2 + 3^2 + 3^2$ = (2^6 or 4^6 or 3^3 or 2^9)

(7) The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)

MODEL (6)

(1) $|-98|$ \mathbb{Z}^- (\notin or \in or \subset or $\not\subset$)

(2) The additive inverse of $(-3)^2$ is (9 or 3 or -3 or -9)

(3) The equation : $x^2 + x = 5$ is of degree. (fourth or third or second or first)

(4) -9^3 $(-3)^2$ ($<$ or $=$ or $>$ or \geq)

(5) $(-6)^2$ - 12 ($>$ or $=$ or $<$ or \leq)

(6) A circle , its diameter length is 20 cm. , then its area = cm^2 ($\pi = 3.14$) (31.4 or 314 or 23.14 or 43.14)

(7) If $3y = 9$, then $y + 5$ = (11 or 32 or 8 or 14)

MODEL (7)

(1) The surface area of the circle =
(π or πr^2 or $2\pi r$ or $2\pi r^2$)

(2) The solution set of the equation : $3x = -6$ in \mathbb{N} is
($\{-3\}$ or $\{3\}$ or $\{2\}$ or \emptyset)

(3) If $x + 5 \geq 2$, then $x \geq$
(3 or -3 or 7 or -4)

(4) $27 + (-3)^2 =$
(-9 or 24 or 3 or 81)
- 4)

(5) $(-5)^2 \times (2)^2 =$
(10^0 or 10 or 10^2 or 10^3)

(6) The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm^2
(16 or 36 or 4 or 24)

(7) The additive inverse of $(-5)^2$ is
(25 or 5 or -5 or -25)

MODEL (8)

(1) 9^2 $(-3)^4$
($>$ or $<$ or $=$ or \geq)

(2) If zero $\in \{5, x-2\}$, then $x =$
(zero or -5 or 2 or -2)

(3) $(-1)^3 - (1)^2 =$
(-2 or 1 or 0 or 2)

(4) The circumference of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

(5) $3^5 \div 3^2 =$
(3^7 or 3^{10} or 3^3 or 3^2)

(6) The number which satisfies the inequality $x - 2 > 3$ is
(3 or 4 or 5 or 6)

(7) The equation : $2x - 1 = 15$ is of the degree.
(first or second or third or fourth)

MODEL (1)

Choose the correct answer :

(1) If $x + 2 = -3$, then $x = \dots$ (-1 or 1 or 5 or -5)

(2) $3 - |-3| = \dots$ (0 or 1 or 3 or 6)

(3) If the lateral area of a cube is 36 cm^2 , then its total area = $\dots \text{ cm}^2$ (144 or 81 or 54 or 96)

(4) $5^2 \times 2^2 = \dots$ (5^4 or 2^4 or 10^2 or 10^4)

(5) $|-5| + 7 = \dots$ (2 or zero or 7 or 12)

(6) $\{(-1)^{\text{zero}}, (\text{zero})^2\} \dots \mathbb{Z}$ (\in \text{ or } \notin \text{ or } \subset \text{ or } \not\subset)

(7) The number that satisfies the inequality $x < -2$ is \dots (-3 or -2 or -1 or 0)

MODEL (2)

(1) $2^6 \times 2^2 \div 2^7 = \dots$ (2^8 or 2^{12} or 2^5 or 2)

(2) The equation : $2^6 + x^5 = 100$ is of the degree. (11th or 5th or 6th or 1st)

(3) $3^2 \times 3^3 = 3^{\dots}$ (5 or 3 or 2 or 1)

(4) The area of the circle whose radius length is $2\pi \text{ cm.}$ is $\dots \text{ cm}^2$ (4\pi \text{ or } 2\pi^2 \text{ or } 12.56 \text{ or } 4\pi^3)

(5) The integer which satisfies the inequality : $y < -3$ is \dots (-2 or -8 or 0 or 1)

(6) If $3x = -9$, then $-5x = \dots$ (15 or 9 or -15 or -|-15|)

(7) The height of the cuboid whose lateral area is 160 cm^2 and the dimensions of its base are 3 cm. and 7 cm. equals $\dots \text{ cm.}$ (6 or 8 or 10 or 16)

MODEL (3)

(1) The number that satisfies the inequality $x > -4$ is

(-5 or -6 or -4 or -3)

(2) The number that satisfies the inequality : $x - 2 > 3$ is

(3) $(-100)^{\text{zero}} = \dots$

(3 or 4 or 5 or 6)
(-100 or 100 or zero or 1)

(4) The additive inverse of $(-5)^2$ is (25 or 5 or -5 or -25)

(5) If $x + 1 = 2$, then $x = \dots$ where $x \in \mathbb{N}$ (3 or 1 or -1 or -3)

(6) A cuboid with a square base, its lateral area is 224 cm^2 , its height is 14 cm.
, then the side length of its base is cm. (14 or 4 or 2 or 3)

(7) The equation : $x^3 + 1 = 10$ is of the degree.

(first or second or third or fourth)

MODEL (4)

(1) If $3x = -9$, $x \in \mathbb{Z}$, then $x + 1 = \dots$ (-3 or -2 or -1 or 4)

(2) The lateral area of the cube = area of one face $\times \dots$

(6 or 5 or 4 or 3)

(3) $(5)^{\text{zero}} = \dots$

(zero or 5 or 1 or 50)

(4) If $a < b$, then $-3a \dots -3b$

(< or > or = or \leq)

(5) $(-3) \times |-5| = \dots$

(15 or -15 or 8 or -8)

(6) $9^7 \div 9^5 = \dots$

(9^{-12} or 9^2 or 9^{zero} or 9^{35})

(7) A circle of diameter length 8 cm. , then its area = $\pi \text{ cm}^2$.

(4 or 8 or 16 or 64)

MODEL (5)

Choose the correct answer :

(1) $(|-9| + 3) + 2$ \mathbb{Z} (\in or \notin or \subset or $\not\subset$)

(2) A cube the perimeter of its base is 36 cm. , then its lateral area = cm^2 (9 or 324 or 36 or 486)

(3) The number which satisfies the inequality : $x > -2$ is (1 or -4 or -3 or -2)

(4) $(-19)^0 + (19)^0$ = (-1 or zero or 1 or 2)

(5) $(-1)^{104} + (-1)^{103}$ = (0 or 2 or -1 or 1)

(6) $3^2 + 3^2 + 3^2$ = (2^6 or 4^6 or 3^3 or 2^9)

(7) The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)

MODEL (6)

(1) $|-98|$ \mathbb{Z}^- (\notin or \in or \subset or $\not\subset$)

(2) The additive inverse of $(-3)^2$ is (9 or 3 or -3 or -9)

(3) The equation : $x^2 + x = 5$ is of degree. (fourth or third or second or first)

(4) -9^3 $(-3)^2$ ($<$ or $=$ or $>$ or \geq)

(5) $(-6)^2$ -12 ($>$ or $=$ or $<$ or \leq)

(6) A circle , its diameter length is 20 cm. , then its area = cm^2 ($\pi = 3.14$) (31.4 or 314 or 23.14 or 43.14)

(7) If $3y = 9$, then $y + 5$ = (11 or 32 or 8 or 14)

MODEL (7)

(1) The surface area of the circle =
(π or πr^2 or $2\pi r$ or $2\pi r^2$)

(2) The solution set of the equation : $3x = -6$ in \mathbb{N} is
($\{-3\}$ or $\{3\}$ or $\{2\}$ or \emptyset)

(3) If $x + 5 \geq 2$, then $x \geq$
(3 or -3 or 7 or -4)

(4) $27 + (-3)^2 =$
(-9 or 24 or 3 or 81)
- 4)

(5) $(-5)^2 \times (2)^2 =$
(10^0 or 10 or 10^2 or 10^3)

(6) The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm^2
(16 or 36 or 4 or 24)

(7) The additive inverse of $(-5)^2$ is
(25 or 5 or -5 or -25)

MODEL (8)

(1) 9^2 $(-3)^4$
($>$ or $<$ or $=$ or \geq)

(2) If zero $\in \{5, x-2\}$, then $x =$
(zero or -5 or 2 or -2)

(3) $(-1)^3 - (1)^2 =$
(-2 or 1 or 0 or 2)

(4) The circumference of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

(5) $3^5 \div 3^2 =$
(3^7 or 3^{10} or 3^3 or 3^2)

(6) The number which satisfies the inequality $x - 2 > 3$ is
(3 or 4 or 5 or 6)

(7) The equation : $2x - 1 = 15$ is of the degree.
(first or second or third or fourth)



Choose the correct answer :

1 If $2x = -6$, then $x \in \dots$ (\mathbb{N} or \emptyset or \mathbb{Z}^+ or \mathbb{Z}^-)

2 The circumference of the circle = $\dots \times \pi$ (r or $2r$ or r^2 or $r+2$)

3 The number which satisfies the inequality : $x > -2$ is \dots (-1 or -2 or -3 or -4)

4 $2^5 \times 2^2 = \dots$ (2^7 or 4^7 or 1)

5 The surface area of a circle = $\pi \times \dots$ (r or r^2 or $2r$)

6 $(-19)^0 + (19)^0 = \dots$ (-1 or zero or 1 or 2)

7 A cube the perimeter of its base is 36 cm. , then its lateral area = \dots cm² (9 or 324 or 36 or 486)

8 The number which satisfies the inequality : $x > -2$ is \dots (1 or -4 or -3 or -2)

9 A circle , its radius length is 7 cm. , then its area = \dots cm² $\left(\pi = \frac{22}{7}\right)$ (145 or 154 or 22 or 7)

10	$(-1)^{104} + (-1)^{103} = \dots$	(0 or 2 or -1 or 1)
11	$3^2 + 3^2 + 3^2 = \dots$	(2^6 or 4^6 or 3^3 or 2^9)
12	The equation : $2^6 + x^5 = 100$ is of the degree.	(11 th or 5 th or 6 th or 1 st)
13	The area of the circle whose radius length is 2π cm. is cm ² .	(4π or $2\pi^2$ or 12.56 or $4\pi^3$)
14	The integer which satisfies the inequality : $y < -3$ is	(-2 or -8 or 0 or 1)
15	If $3x = -9$, then $-5x = \dots$	(15 or 9 or -15 or $- -15 $)
16	The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is	(72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)
17	-9^3 $(-3)^2$	(< or = or > or \geq)
18	$(-1)^{12} + (-1)^{13} = \dots$	(0 or 1 or 2 or -1)
19	$5 \times 5^2 = \dots$	(25^2 or 25^3 or 5^2 or 5^3)
20	If $x - 5 = 7$, $x \in \mathbb{N}$, then $x = \dots$	(2 or 12 or -12 or 35)
21	A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$)	(22 or 11 or 7 or 14)

22	If $2x = 6$, then $4x = \dots$	(3 or 6 or 12 or 16)
23	If $x + 2 < 2$, then $x \in \dots$	(N or \emptyset or \mathbb{Z}^+ or \mathbb{Z}^-)
24	The number which satisfies the inequality : $x + 4 > 2$ is \dots	(-1 or -2 or -3 or -4)
25	A cube of edge length 6 cm. , then its total area = \dots cm ²	(36 or 72 or 144 or 216)
26	The lateral area of the cube = Area of one face $\times \dots$	(2 or 4 or 6 or height)
27	$(-1)^2 \times 2^3 = \dots$	(2^5 or 8 or -8 or -2^5)
28	If $2x = 10$, then $x + 2 = \dots$	(7 or 3 or 5 or 6)
29	The equation : $x^2 + 3 = 4$ is of \dots degree.	(1 st or 3 rd or 2 nd or 4 th)
30	The lateral area of a cube whose side length is 3 cm. = \dots cm ²	(27 or 48 or 36 or 54)
31	The number which satisfies the inequality : $x - 2 > 3$ is \dots	(3 or 5 or 4 or 6)
32	$2^6 \times 2^4 = \dots$	(2^2 or 2^{12} or 2^{10} or 2^{24})

33	All the following numbers satisfy the inequality : $x > -3$ except	(zero or -1 or -2 or -3)
34	The equation : $x + 2 = 10$ is of the degree.	(first or second or third or fourth)
35	$(3)^7 \div (3)^4 = \dots$	($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)
36	If $a < b$, then : $-3a \dots -3b$	($<$ or $>$ or $=$ or \in)
37	The solution set of the equation : $3x = -6$ in \mathbb{N} is	($\{-3\}$ or $\{3\}$ or $\{2\}$ or \emptyset)
38	If $x + 5 \geq 2$, then $x \geq \dots$	(3 or -3 or 7 or -4)
39	$(-5)^2 \times (2)^2 = \dots$	(10^0 or 10 or 10^2 or 10^3)
40	$27 \div (-3)^2 = \dots$	(-9 or 24 or 3 or 81)
41	The equation : $x^2 + x = 5$ is of degree.	(fourth or third or second or first)
42	$(-6)^2 \dots -12$	($>$ or $=$ or $<$ or \leq)
43	A circle , its diameter length is 20 cm. , then its area = cm^2 . ($\pi = 3.14$)	(31.4 or 314 or 23.14 or 43.14)
44	The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm^2	(16 or 36 or 4 or 24)

45	If $3y = 9$, then $y + 5 = \dots$	(11 or 32 or 8 or 14)
46	If $x + 6 = 5$, then the solution set in \mathbb{N} is \dots	($\{-1\}$ or $\{1\}$ or \emptyset or $\{0\}$)
47	If $x + 2 = -5 $, then $x = \dots$	(3 or -3 or 7 or 4)
48	The total area of a cube = area of one face $\times \dots$	(4 or 5 or 6 or 8)
48	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}} = \dots$	(zero or -1 or 1 or 2)
49	The solution set of the inequality : $2 \leq x < 3$ where $x \in \mathbb{N}$ is \dots	($\{\text{zero}\}$ or $\{2\}$ or $\{3\}$ or $\{2, 3\}$)
50	The lateral area of a cuboid of length 3 cm., width 2 cm. and height 4 cm. = \dots cm. ²	(20 or 24 or 40 or 52)
51	If $a < b$, then $-3a \dots -3b$	(< or > or = or \leq)
52	The ratio between the lateral surface area and the total surface area of a cube = \dots	(2:3 or 3:4 or 6:4 or 1:2)
53	The total area of a cube is 324 cm^2 , then the area of face = \dots	(54 cm^2 or 81 cm^2 or 54 cm. or 81 cm.)
54	If $-3x < 30$, then $x \dots (-10)$	(> or < or = or \leq)
55	The equation : $4x^3 - x = 29$ is of \dots degree.	(fourth or third or second or first)

A circle , its radius length is 7 cm. , then its area = cm² $(\pi = \frac{22}{7})$
(145 or 154 or 22 or 7)

With my best wishes
Yours affecly (most affecly)

April revision

1. $\frac{1}{3}, \frac{2}{3}, 1, \frac{4}{3}, \dots, \dots$ (in the same pattern)

2. The circumference of the circle = $\times \pi$
(r or 2r or r^2 or $r+2$)

3. $\frac{2^3 \times 2^5}{2^2} = \dots$

4. $(-1)^3 + 2 = \dots$ (3 or -1 or -3 or 1)

5. The surface area of a circle = $\pi \times \dots$ (r or r^2 or 2r)

6. $(-5)^2 \times (2)^2 = \dots$ (10^0 or 10 or $(10)^2$ or $(10)^3$)

7. The sum of edge lengths of a cube is 84 cm. , then its lateral area equals cm^2

8. $2^5 \times 2^2 = \dots$ (2^7 or 4^7 or 1)

9. The surface area of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

10. If the lateral area of a cube is 36 cm^2 , then its total area = cm^2
(144 or 81 or 54 or 96)

11. $5^2 \times 2^2 = \dots$ (5^4 or 2^4 or 10^2 or 10^4)

12. 1, 4, 7, 10, , (in the same pattern)

13. A cuboid its lateral area 120 cm^2 and the perimeter of its base 20 cm. , then its height = cm.

14. $\frac{8^3 \times 8^4}{8^7} = \dots$

15. $(-1)^8 + (-1)^9 = \dots$ (zero or -1 or 1 or 2)

16. $\{(-1)^{\text{zero}}, (\text{zero})^2\} \dots \mathbb{Z}$ (\in or \notin or \subset or $\not\subset$)

17. $(5)^{\text{zero}} = \dots$ (zero or 5 or 1 or 50)

18. The sum of edge lengths of a cube is 96 cm. , then its lateral area = cm^2

19. 25, 21, 17, 13, , (in the same pattern)

20.	$(-1)^2 - 1 = \dots$	
21.	$3^5 \div 3^2 = \dots$	(3^7 or 3^{10} or 3^3 or 3^2)
22.	$9^2 \dots (-3)^4$	($>$ or $<$ or $=$ or \geq)
23.	A circle is of diameter length 10 cm. , then its area = \dots cm 2	(50 or 100 or 78.5 or 25)
24.	$\frac{1}{3}, \frac{1}{6}, \frac{1}{12}, \frac{1}{24}, \dots, \dots$ (in the same pattern)	
25.	$(-100)^{\text{zero}} = \dots$	(-100 or 100 or zero or 1)
26.	The lateral area of the cube = area of one face $\times \dots$	(6 or 5 or 4 or 3)
27.	$9^7 \div 9^5 = \dots$	(9^{-12} or 9^2 or 9^{zero} or 9^{35})
28.	The next number in the pattern : 2 , 3 , 5 , 8 , 13 is \dots	(18 or 19 or 20 or 21)
29.	A circle of diameter length 8 cm. , then its area = $\dots \pi$ cm 2	(4 or 8 or 16 or 64)
30.	$(-19)^0 + (19)^0 = \dots$	(-1 or zero or 1 or 2)
31.	The height of the cuboid whose lateral area is 160 cm 2 and the dimensions of its base are 3 cm. and 7 cm. equals \dots cm.	(6 or 8 or 10 or 16)
32.	A cube the perimeter of its base is 36 cm. , then its lateral area = \dots cm 2	(9 or 324 or 36 or 486)
33.	$(-1)^{104} + (-1)^{103} = \dots$	(0 or 2 or -1 or 1)
34.	$3^2 + 3^2 + 3^2 = \dots$	(2^6 or 4^6 or 3^3 or 2^9)
35.	The lateral area of the cuboid whose length is 6 cm. and width is 4 cm. and its height is 5 cm. equals \dots	
36.	A circle of diameter length 14 cm. , then its area = \dots cm 2 ($\pi = \frac{22}{7}$)	
37.	If $a = 3$, $b = -2$, then $3 a b = \dots$	
38.	$-9^3 \dots (-3)^2$	(< or = or > or \geq)

39.	The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)
40.	Half the T.S.A. of a cube whose sum of its edge lengths is 36 cm. is cm^2 (108 or 27 or 54 or 18)
41.	The ratio between the T.S.A. and L.S.A. of the cube is
42.	$(-1)^{12} + (-1)^{13} =$ (0 or 1 or 2 or -1)
43.	$5 \times 5^2 =$ (25^2 or 25^3 or 5^2 or 5^3)
44.	A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$) (22 or 11 or 7 or 14)
45.	A cube of edge length 6 cm. , then its lateral area = cm^2 (216 or 180 or 144 or 108)
46.	The lateral area of the cube = Area of one face \times (2 or 4 or 6 or height)
47.	$\frac{(-5)^3 \times (-5)^2}{(-5)^4}$
48.	$(-1)^2 \times 2^3 =$ (2^5 or 8 or -8 or -2^5)
49.	The lateral area of a cube whose side length is 3 cm. = cm^2 (27 or 48 or 36 or 54)
50.	$2^6 \times 2^4 =$ (2^2 or 2^{12} or 2^{10} or 2^{24})
51.	$3^7 \div 3^7 =$
52.	A circle , its diameter length is 14 cm. , then its area = cm^2 ($\pi = \frac{22}{7}$)
53.	A cuboid whose length is 9 cm. , width is 7 cm. and its height is 10 cm. , then its lateral area =
54.	If the radius length of a circle is 10 cm. , then its surface area = cm^2 . (Given that : $\pi = 3.14$) (3.14 or 31.4 or 314 or 3140)
55.	If the edge length of a cube is 6 cm. , then its total area = cm^2 (24 or 36 or 144 or 216)
56.	$(3)^7 \div (3)^4 =$ ($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)
57.	If the area of one face of a cube equal 9 cm^2 , then its total area = cm^2

58.	The perimeter of one face of a cube is 12 cm. , then its total area = cm ²	
59.	$(-5)^2 \times (2)^2$ = (10^0 or 10 or 10^2 or 10^3)	
60.	$27 \div (-3)^2$ = (-9 or 24 or 3 or 81)	
61.	$(-6)^2$ – 12 ($>$ or $=$ or $<$ or \leq)	
62.	A circle , its diameter length is 20 cm. , then its area = cm ² ($\pi = 3.14$) (31.4 or 314 or 23.14 or 43.14)	
63.	$2 - (-3)^0$ = (5 or 3 or 1 or 2)	
64.	The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm ² (16 or 36 or 4 or 24)	
65.	The additive inverse of $(-3)^2$ is (9 or 3 or -3 or -9)	
66.	If the total area of the cube = 54 cm ² , then the area of one face = cm ² (4 or 5 or 8 or 9)	
67.	The total area of the cube = Area of one face \times (2 or 4 or 6 or 8)	
68.	$2^5 \times 2^2$ = (2^7 or 2^4 or 2^3 or 1)	
69.	A circle , its radius length is 4 cm. , then its area = π cm ² (4 or 8 or 12 or 16)	
70.	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}}$ = (zero or -1 or 1 or 2)	
71.	The height of a cuboid whose lateral area is 160 cm ² and dimensions of its base are 7 cm. and 3 cm. = cm.	
72.	The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm ² (20 or 24 or 40 or 52)	
73.	A cube of edge length 6 cm. , then its total area = cm ² (36 or 72 or 144 or 216)	
74.	The perimeter of the base of the cuboid is 10 cm. , its height is 4 cm. , then its lateral area = cm ²	
75.	The total surface area of a cuboid = 100 cm ² and area of one base 20 cm ² , then its lateral surface area = cm ² (40 or 60 or 80 or 140)	
76.	The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm ²	

April revision

1. $\frac{1}{3}, \frac{2}{3}, 1, \frac{4}{3}, \dots, \frac{5}{3}, \dots$ (in the same pattern)

2. The circumference of the circle = $\times \pi$
(r or $2r$ or r^2 or $r+2$)

3. $\frac{2^3 \times 2^5}{2^2} = \dots 2^6$

4. $(-1)^3 + 2 = \dots \quad (3 \text{ or } -1 \text{ or } -3 \text{ or } 1)$

5. The surface area of a circle = $\pi \times \dots \quad (r \text{ or } r^2 \text{ or } 2r)$

6. $(-5)^2 \times (2)^2 = \dots \quad (10^0 \text{ or } 10 \text{ or } (10)^2 \text{ or } (10)^3)$

7. The sum of edge lengths of a cube is 84 cm. , then its lateral area equals 196 cm^2 .

8. $2^5 \times 2^2 = \dots \quad (2^7 \text{ or } 4^7 \text{ or } 1)$

9. The surface area of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

10. If the lateral area of a cube is 36 cm^2 , then its total area = cm^2
(144 or 81 or 54 or 96)

11. $5^2 \times 2^2 = \dots \quad (5^4 \text{ or } 2^4 \text{ or } 10^2 \text{ or } 10^4)$

12. $1, 4, 7, 10, \dots, 13, \dots, 16$ (in the same pattern)

13. A cuboid its lateral area 120 cm^2 and the perimeter of its base 20 cm. , then its height = 6 cm.

14. $\frac{8^3 \times 8^4}{8^7} = \dots 1$

15. $(-1)^8 + (-1)^9 = \dots \quad (\text{zero or } -1 \text{ or } 1 \text{ or } 2)$

16. $\{(-1)^{\text{zero}}, (\text{zero})^2\} \dots \mathbb{Z} \quad (\in \text{ or } \notin \text{ or } \subset \text{ or } \not\subset)$

17. $(5)^{\text{zero}} = \dots \quad (\text{zero or } 5 \text{ or } 1 \text{ or } 50)$

18. The sum of edge lengths of a cube is 96 cm. , then its lateral area = 256 cm^2

19. $25, 21, 17, 13, \dots, 9, \dots, 5$ (in the same pattern)

20. $(-1)^2 - 1 = \dots$ 0

21. $3^5 \div 3^2 = \dots$ (3^7 \text{ or } 3^{10} \text{ or } 3^3 \text{ or } 3^2)

22. $9^2 \dots (-3)^4$ (> \text{ or } < \text{ or } = \text{ or } \geq)

23. A circle is of diameter length 10 cm. , then its area = cm^2 (50 \text{ or } 100 \text{ or } 78.5 \text{ or } 25)

24. $\frac{1}{3}, \frac{1}{6}, \frac{1}{12}, \frac{1}{24}, \dots, \frac{1}{48}, \frac{1}{96}$ (in the same pattern)

25. $(-100)^{\text{zero}} = \dots$ (-100 \text{ or } 100 \text{ or } \text{zero} \text{ or } 1)

26. The lateral area of the cube = area of one face $\times \dots$ (6 \text{ or } 5 \text{ or } 4 \text{ or } 3)

27. $9^7 \div 9^5 = \dots$ (9^{-12} \text{ or } 9^2 \text{ or } 9^{\text{zero}} \text{ or } 9^{35})

28. The next number in the pattern : 2 , 3 , 5 , 8 , 13 is (18 \text{ or } 19 \text{ or } 20 \text{ or } 21)

29. A circle of diameter length 8 cm. , then its area = $\pi \text{ cm}^2$ (4 \text{ or } 8 \text{ or } 16 \text{ or } 64)

30. $(-19)^0 + (19)^0 = \dots$ (-1 \text{ or } \text{zero} \text{ or } 1 \text{ or } 2)

31. The height of the cuboid whose lateral area is 160 cm^2 and the dimensions of its base are 3 cm. and 7 cm. equals cm. (6 \text{ or } 8 \text{ or } 10 \text{ or } 16)

32. A cube the perimeter of its base is 36 cm. , then its lateral area = cm^2 (9 \text{ or } 324 \text{ or } 36 \text{ or } 486)

33. $(-1)^{104} + (-1)^{103} = \dots$ (0 \text{ or } 2 \text{ or } -1 \text{ or } 1)

34. $3^2 + 3^2 + 3^2 = \dots$ (2^6 \text{ or } 4^6 \text{ or } 3^3 \text{ or } 2^9)

35. The lateral area of the cuboid whose length is 6 cm. and width is 4 cm. and its height is 5 cm. equals (100 \text{ cm}^2)

36. A circle of diameter length 14 cm. , then its area = cm^2 (\pi = \frac{22}{7})

37. If $a = 3$, $b = -2$, then $3ab = \dots$ (-18)

38. $-9^3 \dots (-3)^2$ (< \text{ or } = \text{ or } > \text{ or } \geq)

39. The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)

40. Half the T.S.A. of a cube whose sum of its edge lengths is 36 cm. is cm^2 (108 or 27 or 54 or 18)

41. The ratio between the T.S.A. and L.S.A. of the cube is 3 : 2

42. $(-1)^{12} + (-1)^{13} = \dots$ (0 or 1 or 2 or -1)

43. $5 \times 5^2 = \dots$ (25^2 or 25^3 or 5^2 or 5^3)

44. A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$) (22 or 11 or 7 or 14)

45. A cube of edge length 6 cm. , then its lateral area = cm^2 (216 or 180 or 144 or 108)

46. The lateral area of the cube = Area of one face \times (2 or 4 or 6 or height)

47.
$$\frac{(-5)^3 \times (-5)^2}{(-5)^4} = -5$$

48. $(-1)^2 \times 2^3 = \dots$ (2^5 or 8 or -8 or -2^5)

49. The lateral area of a cube whose side length is 3 cm. = cm^2 (27 or 48 or 36 or 54)

50. $2^6 \times 2^4 = \dots$ (2^2 or 2^{12} or 2^{10} or 2^{24})

51. $3^7 \div 3^7 = \dots$ 1

52. A circle , its diameter length is 14 cm. , then its area = 154 cm^2 ($\pi = \frac{22}{7}$)

53. A cuboid whose length is 9 cm. , width is 7 cm. and its height is 10 cm. , then its lateral area = 320

54. If the radius length of a circle is 10 cm. , then its surface area = cm^2 .
(Given that : $\pi = 3.14$) (3.14 or 31.4 or 314 or 3140)

55. If the edge length of a cube is 6 cm. , then its total area = cm^2 (24 or 36 or 144 or 216)

56. $(3)^7 \div (3)^4 = \dots$ ($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)

57. If the area of one face of a cube equal 9 cm^2 , then its total area = 54 cm^2

58. The perimeter of one face of a cube is 12 cm. , then its total area = **54** cm²

59. $(-5)^2 \times (2)^2$ = (10^0 or 10 or 10^2 or 10^3)

60. $27 \div (-3)^2$ = (-9 or 24 or **3** or 81)

61. $(-6)^2$ - 12 (**>** or = or < or \leq)

62. A circle , its diameter length is 20 cm. , then its area = cm² ($\pi = 3.14$) (31.4 or **314** or 23.14 or 43.14)

63. $2 - (-3)^0$ = (5 or 3 or **1** or 2)

64. The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm² (16 or 36 or 4 or **24**)

65. The additive inverse of $(-3)^2$ is (9 or 3 or -3 or **-9**)

66. If the total area of the cube = 54 cm² , then the area of one face = cm² (4 or 5 or 8 or **9**)

67. The total area of the cube = Area of one face \times (2 or 4 or **6** or 8)

68. $2^5 \times 2^2$ = (**2⁷** or 2^4 or 2^3 or 1)

69. A circle , its radius length is 4 cm. , then its area = π cm² (4 or 8 or 12 or **16**)

70. $(-1)^8 + (-1)^9 + (-1)^{\text{zero}}$ = (zero or -1 or **1** or 2)

71. The height of a cuboid whose lateral area is 160 cm² and dimensions of its base are 7 cm. and 3 cm. = **8** cm.

72. The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm² (20 or 24 or **40** or 52)

73. A cube of edge length 6 cm. , then its total area = cm² (36 or 72 or 144 or **216**)

74. The perimeter of the base of the cuboid is 10 cm. , its height is 4 cm. , then its lateral area = **40** cm²

75. The total surface area of a cuboid = 100 cm² and area of one base 20 cm² , then its lateral surface area = cm² (40 or **60** or 80 or 140)

76. The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = **40** cm²

★ Remember that

- $a^n \times a^m = a^{n+m}$, $a \in \mathbb{Z}, a \neq 0$
- $a^n \div a^m = a^{n-m}$, $a \in \mathbb{Z}, a \neq 0$, $n > m$
- $a^0 = 1$, $a \neq 0$

• **The equation :** is a mathematical sentence which includes one variable (unknown) (symbol) or more and equality relation between two sides.

• **The inequality:** is a mathematical sentence which includes one variable (unknown) (symbol) or more and inequality relation between two sides.

• **Solving the equation:** is finding the value of unknown that satisfies the equation.

• If we multiply or divide each side of an inequality by a negative number we must reverse inequality relation.

• $x - 2 = 5$ is an equation of the **first** degree.

• $x^2 + 3 = 7$ is an equation of the **second** degree.

• $x^3 + 1 = 9$ is an equation of the **third** degree.

• The **circumference of the circle** = diameter length $\times \pi$

• The **circumference of the circle** = $2 \times$ radius length $\times \pi$

$$C = d \times \pi$$

$$C = 2 \times r \times \pi$$

$$\pi = \frac{22}{7} = 3.14$$

$$d = C \div \pi$$

$$r = C \div 2\pi$$

$$2\pi = \frac{44}{7} = 6.28$$



- The diameter length of the circle = radius length $\times 2$
- The radius length of the circle = diameter length $\div 2$
- The area of the circle = πr^2

$$d = r \times 2$$

$$r = d \div 2$$

$$A = \pi r^2$$

- The perimeter of one face of a cube = edge length $\times 4$

$$P = e.l \times 4$$

- The area of one face of a cube = edge length \times itself

$$A = e.l \times e.l$$

- The lateral area of a cube = area of one face $\times 4$

$$L.S.A = e.l \times e.l \times 4$$

- The total area of a cube = area of one face $\times 6$

$$T.S.A = e.l \times e.l \times 6$$

- The area of one face a cube = L.S.A $\div 4$

- The area of one face a cube = T.S.A $\div 6$

- $e.l =$ perimeter of one face $\div 4$

- $e.l =$ the sum of edge lengths $\div 12$

- The volume of a cube = $e.l \times e.l \times e.l$

- The ratio between area of one face a cube and it's lateral area = 1 : 4

- The ratio between area of one face a cube and it's total area = 1 : 6

- The ratio between lateral area a cube and it's total area = 2 : 3



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- The lateral area of a cuboid = perimeter of the base \times height
- $L.S.A = p.b \times h$ • $p.b = L.S.A \div h$ • $h = L.S.A \div p.b$
- The total area of a cuboid = The lateral area + 2 (area of the base)
- $T.S.A = L.S.A + 2(b.a)$
- The total area of a cuboid without a lid = $L.S.A + (b.a)$
- The area of one base = $(T.S.A - L.S.A) \div 2$

Cuboid with a rectangular base

- The perimeter of the base = $(L + W) \times 2$
- The area of one base = $L \times W$
- $L.S.A = (L + W) \times 2 \times h$
- $T.S.A = L.S.A + 2(L \times W)$
- The total area of a cuboid = $(L \times W + L \times h + W \times h) \times 2$

Cuboid with a square base

- The perimeter of the base = $S.L \times 4$
- The area of one base = $S.L \times S.L$
- $L.S.A = S.L \times 4 \times h$
- $T.S.A = L.S.A + 2(S.L \times S.L)$

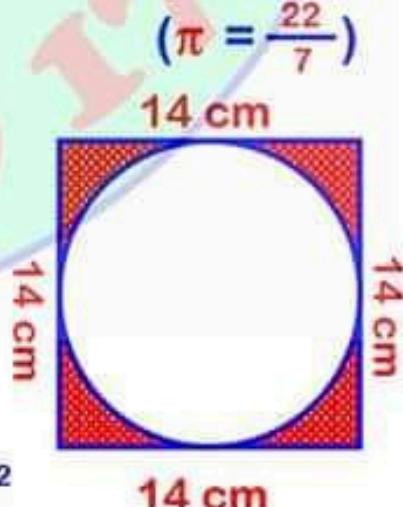
◎ Calculate the area of shaded part:-

$$(\pi = \frac{22}{7})$$

• Area of the square = $S.L \times S.L$
 $= 14 \times 14 = 196 \text{ cm}^2$

• Area of the circle = πr^2
 $= \frac{22}{7} \times 7 \times 7 = 154 \text{ cm}^2$

• Area of shaded part = $196 - 154 = 42 \text{ cm}^2$



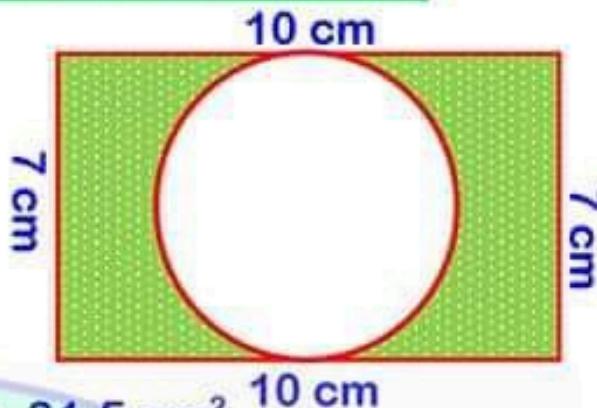
● Area of the rectangle = $L \times W$

$$= 10 \times 7 = 70 \text{ cm}^2$$

● Area of the circle = πr^2

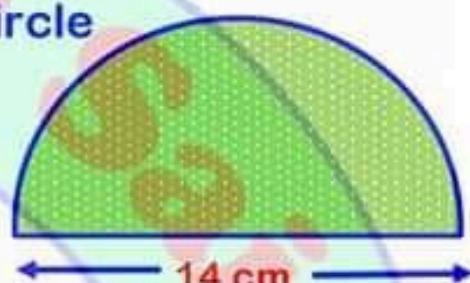
$$= \frac{22}{7} \times 3.5 \times 3.5 = 38.5 \text{ cm}^2$$

● Area of shaded part = $70 - 38.5 = 31.5 \text{ cm}^2$



● Area of shaded part = $\frac{1}{2}$ area of the circle

$$= \frac{1}{2} \pi r^2 = \frac{1}{2} \times \frac{22}{7} \times 7 \times 7 = 77 \text{ cm}^2$$



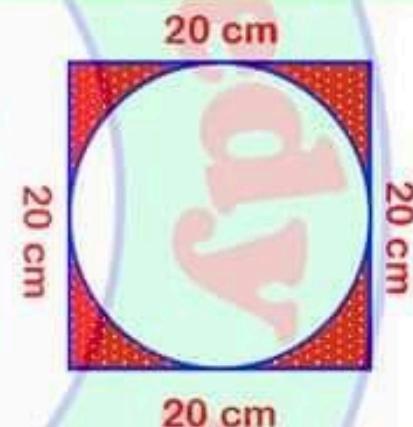
In the opposite figure :- A square of side length 20 cm

, then find the area of shaded part in cm^2 . ($\pi = 3.14$)

● Area of the square = $S.L \times S.L = 20 \times 20 = 400 \text{ cm}^2$

● Area of the circle = $\pi r^2 = 3.14 \times 10 \times 10 = 314 \text{ cm}^2$

● Area of shaded part = $400 - 314 = 86 \text{ cm}^2$



In the opposite figure :- A rectangle of length 10 cm , its width 7 cm

And two semicircles. Find the area of the figure in cm^2 .

$$(\pi = \frac{22}{7})$$

● Area of the rectangle = $L \times W = 10 \times 7 = 70 \text{ cm}^2$

● Area of the circle = πr^2

$$= \frac{22}{7} \times 3.5 \times 3.5 = 38.5 \text{ cm}^2$$

● Area of shaded part = $70 + 38.5 = 108.5 \text{ cm}^2$



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Choose the correct answer

(1) $(-1)^8 + (-1)^9 = \dots$ (zero or -1 or 1 or 2)

(2) $(-1)^8 - (-1)^9 = \dots$ (zero or -1 or 1 or 2)

(3) If F is an odd number, then the even number from the following is..... (F^2 or F^2+F or $2F+1$ or F^3)

(4) If zero $\in \{ 5, x-3 \}$, then $x = \dots$ (zero or -5 or 3 or -3)

(5) $(-5)^{\text{zero}} + (5)^{\text{zero}} = \dots$ (zero or -1 or 1 or 2)

(6) If the age of Ahmed is $3x$ years, then his age 3 years ago was..... ($x+3$ or $x-3$ or $3x-3$ or $3x+3$)

(7) The natural number just next to the number $x+1$ is (x or $x+2$ or $x+3$ or $x-1$)

(8) The preceding integer number to the number $x-1$ is (x or $x+1$ or $x+2$ or $x-2$)

(9) The additive inverse of $(-8)^{\text{zero}}$ is (8 or -8 or 1 or -1)

(10) The additive inverse of $(-1)^3$ is (3 or -1 or 1 or -3)

(11) $3^6 \div 3^3 = \dots$ (6^3 or 3^2 or 27 or 81)

(12) $3^2 + 3^2 + 3^2 = \dots$ (2^3 or 3^3 or 3^6 or 2^6)

(13) $(-3)^3 + (-3)^2 = \dots$ (-18 or $(-3)^5$ or $(-3)^6$ or 18)

(14) The additive inverse of $(-3)^2$ is (9 or 3 or -9 or -3)

(15) Which of the following represents an equation ? ($x-17$ or $22-7 < 15$ or $x > -11$ or $2x+3=7$)

(16) If : $x+2 = |-4|$, then $x = \dots$ (-2 or 2 or -6 or 6)

(17) The set of solution of the equation $2x-1 = -5$ in \mathbb{Z}^- is ({3} or {-3} or {2} or {-2})

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(18) The equation $x^2 + 3 = 4$ is of the degree.

(first or second or third or fourth)

(19) The number which satisfies the inequality $x - 2 > 3$ is

(3 or 4 or 5 or 6)

(20) All the following numbers satisfy the inequality $x > -3$ except

(zero or -1 or -2 or -4)

(21) If: $x + 3 = 8$, $x \in \mathbb{Z}^-$, then solution set is ($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

(22) The number which if it is add to its double the result will be 9 is

(2 or 3 or 4 or 5)

(23) The set of solution of the equation: $x + 3 = 5$ in \mathbb{Z} is

($\{-8\}$ or $\{-2\}$ or $\{2\}$ or $\{8\}$)

(24) The set of solution of the equation: $4x = -16$ in \mathbb{N} is

(\emptyset or $\{-4\}$ or {zero} or $\{4\}$)

(25) The set of solution of the equation: $2x + 3 = 3$ in \mathbb{Z} is

($\{3\}$ or $\{-6\}$ or $\{-3\}$ or {zero})

(26) The set of solution of the inequality: $2 \leq x < 3$ in \mathbb{Z} is

($\{0\}$ or $\{2\}$ or $\{3\}$ or $\{2, 3\}$)

(27) The set of solution of the inequality: $-1 < x \leq 1$ in \mathbb{Z} is

($\{-1\}$ or $\{0\}$ or $\{-1, 1\}$ or $\{0, 1\}$)

(28) If the set of substitution is $\{1, 2, 3, 4\}$, then the set of solution of the equation: $x + 6 = 10$ is ($\{1\}$ or $\{2\}$ or $\{3\}$ or $\{4\}$)

(29) The set of solution of the inequality: $-1 < 2x < 1$ in \mathbb{Z} is

($\{-1\}$ or $\{-2\}$ or $\{-4\}$ or $\{0\}$)

(30) The greatest integer which satisfies the inequality: $3 \leq x < 6$ is

(3 or 4 or 5 or 6)

(31) The circumference of the circle = (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

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(32) The area of the circle's surface = (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

(33) Two numbers , one of them is more than the other by 3 , if the smaller number equals ($x - 3$) then the greater number equals.....
 ($3 - x$ or x or $3x$ or $x + 3$)

(34) The sum of two integer numbers is 7 , if one of them is x , then the other number is ($x - 7$ or $7 - x$ or $x + 7$ or $7x$)

(35) A circle of radius length 7 cm , then its circumference = cm
 $(\pi = \frac{22}{7})$ (49 or 44 or 154 or 22)

(36) A circle of radius length 7 cm , then its area = cm^2 ($\pi = \frac{22}{7}$)
 (49 or 44 or 154 or 22)

(37) The surface area of the circle of diameter length 8 cm = $\pi \text{ cm}^2$
 (4 or 8 or 16 or 64)

(38) A circle, its diameter length 6 cm, then its surface area = cm^2
 (3π or 6π or 9π or 36π)

(39) A circle its area is $25\pi \text{ cm}^2$, then its radius length = cm
 (25 or 50 or 125 or 5)

(40) A circle its area is $25\pi \text{ cm}^2$, then its diameter length = cm
 (100 or 50 or 10 or 5)

(41) The surface area of the circle of radius length 7 cm = $\pi \text{ cm}^2$
 (7 or 14 or 49 or 154)

(42) If the circumference of the circle = $20\pi \text{ cm}$, then its area = $\pi \text{ cm}^2$
 (100 or 200 or 300 or 400)

(43) A circle its area is $49\pi \text{ cm}^2$, then its radius length = cm
 (7 or 14 or 21 or 28)

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(44) The lateral area of the cube = Area of one face x

(2 or 3 or 4 or 6)

(45) The total area of the cube = Area of one face x

(2 or 3 or 4 or 6)

(46) The lateral area of the cuboid = the perimeter of the base x
(height or width or length or volume)

(47) The lateral area of the cuboid with length is 3 cm , width is 2 cm and
height is 4 cm = cm² (20 or 24 or 40 or 52)

(48) The lateral area of the cuboid with square base of length is 8 cm and the
height is 5 cm = cm² (40 or 80 or 160 or 240)

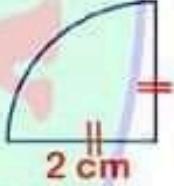
(49) The total area of the cuboid with length is 12 cm , width is 6 cm and height
is 4 cm. = cm² (216 or 36 or 360 or 288)

(50) The total area of the cuboid = 32 cm² and it's lateral area = 12 cm², then
the area of one of its base = cm² (32 or 20 or 18 or 10)

(51) A cuboid its dimensions base are 4 cm and 3 cm and its lateral area
= 140 cm² , then its volume = cm³ (1680 or 120 or 168 or 60)

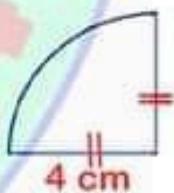
(52) The perimeter of the opposite figure = cm

(2π or 5π or $\pi + 4$ or $4\pi + 4$)



(53) The area of the opposite figure = cm²

(16π or 4π or 2π or $4\pi^2$)



(54) The area of one face of the cube = of its lateral area

($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{1}{6}$)

(55) The area of one face of the cube = of its total area

($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{1}{6}$)

(56) The perimeter of the base cube is 28 cm , then its lateral area = cm²

(112 or 196 or 294 or 7)

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(57) The sum of the edge length of a cube equals 120 cm , then its **total area** = cm² (100 or 200 or 400 or 600)

(58) The **total area** of a cube is 486 cm² , then its **lateral area** = cm² (81 or 324 or 27 or 243)

(59) The **lateral area** of a cube is 100 cm² , then its **total area** = cm² (25 or 50 or 125 or 150)

(60) The **volume** area of a cube is 1000 cm³ , then its **lateral area** = cm² (10 or 100 or 400 or 600)

(61) The perimeter of the base of a cuboid = 32 cm and its height = 10 cm , then its **lateral area** = cm² (160 or 320 or 32 or 3200)

(62) The circumference of the circle = $\pi \times$ (diagonal or side or diameter or radius)

(63) The circumference of the circle = $2 \times \pi \times$ (diagonal or side or diameter or radius)

(64) A cuboid shaped box with a square base its length is 9 cm and its height is 20 cm , then its **lateral area** = cm² (180 or 360 or 540 or 720)

(65) If the **lateral area** of a cube is 36 cm² , then its **total area** = cm² (9 or 27 or 45 or 54)

(66) If the **total area** of a cube is 72 cm² , then its **lateral area** = cm² (12 or 24 or 36 or 48)

(67) A cube without a lid its edge length is 10 cm , then its **total area** = cm² (100 or 400 or 500 or 600)

(68) The area of one face of the cube whose **lateral area** = 400 cm² is cm² (25 or 50 or 100 or 150)

(69) The edge length of the cube whose **total area** = 600 cm² is cm (10 or 25 or 50 or 100)

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(70) The perimeter of the base cube is 36 cm , then its **lateral area** = cm²
 (9 or 81 or 324 or 546)

(71) A cube of edge length 6 cm , then its **lateral area** = cm²
 (24 or 36 or 144 or 216)

(72) A cube of edge length 5 cm , then its **total area** = cm²
 (25 or 100 or 125 or 150)

(73) The perimeter of one face of a cube = 12 cm , then its **total area** = cm²
 (9 or 27 or 36 or 54)

(74) The **lateral area** of a cube = 100 cm² , then its **volume** = cm³
 (5 or 25 or 125 or 150)

(75) The **sum of the edge** of a cube = 24 cm, then **lengths its total area**
 = cm² (2 or 4 or 16 or 24)

(76) The ratio between the area of **one face** of a cube and its **lateral area**
 = (1:1 or 1:4 or 1:6 or 2:3)

(77) The ratio between the area of **one face** of a cube and its **total area**
 = (1:1 or 1:4 or 1:6 or 2:3)

(78) The ratio between the area of any two faces of a cube =
 (1:1 or 1:4 or 1:6 or 2:3)

(79) The ratio between the **lateral area** of a cube and its **total area** =
 (1:1 or 1:4 or 1:6 or 2:3)

(80) The **lateral area** of a cuboid = 160 cm² and dimensions base are 3 cm. and
 7 cm , then its **height** = cm (6 or 8 or 10 or 16)

Mr. Omar EL Saiedy

With my best wishes

Mr. Omar EL Saiedy

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★ Remember that

- $a^n \times a^m = a^{n+m}$, $a \in \mathbb{Z}, a \neq 0$
- $a^n \div a^m = a^{n-m}$, $a \in \mathbb{Z}, a \neq 0$, $n > m$
- $a^0 = 1$, $a \neq 0$



- **The equation :** is a mathematical sentence which includes one variable (unknown) (symbol) or more and equality relation between two sides.
- **The inequality:** is a mathematical sentence which includes one variable (unknown) (symbol) or more and inequality relation between two sides.
- **Solving the equation:** is finding the value of unknown that satisfies the equation.
- If we multiply or divide each side of an inequality by a negative number we must reverse inequality relation.
- $x - 2 = 5$ is an equation of the **first** degree.
- $x^2 + 3 = 7$ is an equation of the **second** degree.
- $x^3 + 1 = 9$ is an equation of the **third** degree.

- The circumference of the circle = diameter length $\times \pi$
- The circumference of the circle = $2 \times$ radius length $\times \pi$

$$C = d \times \pi$$

$$C = 2 \times r \times \pi$$

$$\pi = \frac{22}{7} = 3.14$$

$$d = C \div \pi$$

$$r = C \div 2\pi$$

$$2\pi = \frac{44}{7} = 6.28$$

- The diameter length of the circle = radius length $\times 2$
- The radius length of the circle = diameter length $\div 2$
- The area of the circle = πr^2

$$d = r \times 2$$

$$r = d \div 2$$

$$A = \pi r^2$$

- The perimeter of one face of a cube = edge length $\times 4$

$$P = e.l \times 4$$

- The area of one face of a cube = edge length \times itself

$$A = e.l \times e.l$$

- The lateral area of a cube = area of one face $\times 4$

$$L.S.A = e.l \times e.l \times 4$$

- The total area of a cube = area of one face $\times 6$

$$T.S.A = e.l \times e.l \times 6$$

- The area of one face a cube = L.S.A $\div 4$

- The area of one face a cube = T.S.A $\div 6$

- $e.l =$ perimeter of one face $\div 4$

- $e.l =$ the sum of edge lengths $\div 12$

- The volume of a cube = $e.l \times e.l \times e.l$

- The ratio between area of one face a cube and it's lateral area = 1 : 4

- The ratio between area of one face a cube and it's total area = 1 : 6

- The ratio between lateral area a cube and it's total area = 2 : 3



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- The lateral area of a cuboid = perimeter of the base \times height
- $L.S.A = p.b \times h$ • $p.b = L.S.A \div h$ • $h = L.S.A \div p.b$
- The total area of a cuboid = The lateral area + 2 (area of the base)
- $T.S.A = L.S.A + 2 (b.a)$
- The total area of a cuboid without a lid = $L.S.A + (b.a)$
- The area of one base = $(T.S.A - L.S.A) \div 2$

Cuboid with a rectangular base

- The perimeter of the base = $(L + W) \times 2$
- The area of one base = $L \times W$
- $L.S.A = (L + W) \times 2 \times h$
- $T.S.A = L.S.A + 2 (L \times W)$
- The total area of a cuboid = $(L \times W + L \times h + W \times h) \times 2$

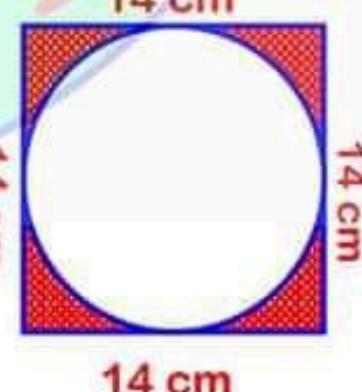
Cuboid with a square base

- The perimeter of the base = $S.L \times 4$
- The area of one base = $S.L \times S.L$
- $L.S.A = S.L \times 4 \times h$
- $T.S.A = L.S.A + 2 (S.L \times S.L)$

◎ Calculate the area of shaded part:-

$$(\pi = \frac{22}{7})$$

- Area of the square = $S.L \times S.L$
 $= 14 \times 14 = 196 \text{ cm}^2$
- Area of the circle = πr^2
 $= \frac{22}{7} \times 7 \times 7 = 154 \text{ cm}^2$
- Area of shaded part = $196 - 154 = 42 \text{ cm}^2$



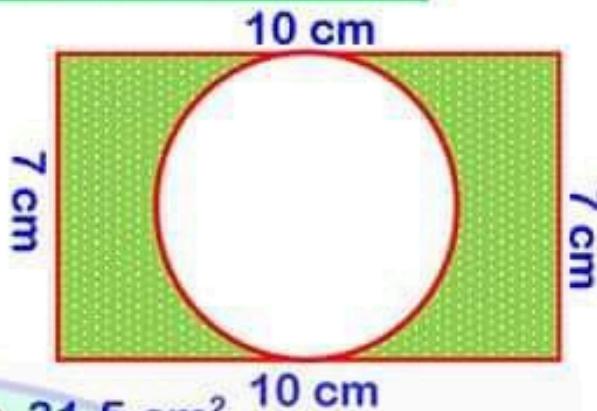
● Area of the rectangle = $L \times W$

$$= 10 \times 7 = 70 \text{ cm}^2$$

● Area of the circle = πr^2

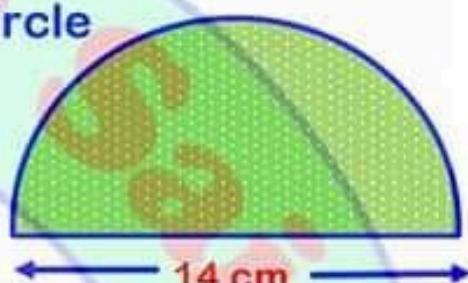
$$= \frac{22}{7} \times 3.5 \times 3.5 = 38.5 \text{ cm}^2$$

● Area of shaded part = $70 - 38.5 = 31.5 \text{ cm}^2$



● Area of shaded part = $\frac{1}{2}$ area of the circle

$$= \frac{1}{2} \pi r^2 = \frac{1}{2} \times \frac{22}{7} \times 7 \times 7 = 77 \text{ cm}^2$$



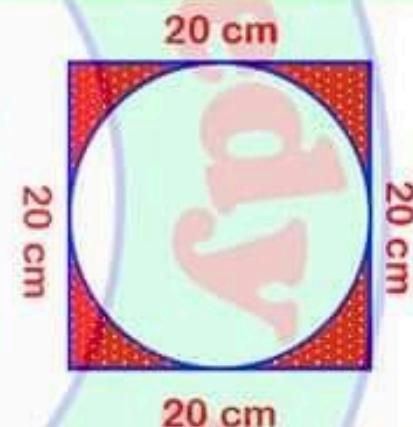
In the opposite figure :- A square of side length 20 cm

, then find the area of shaded part in cm^2 . ($\pi = 3.14$)

● Area of the square = $S.L \times S.L = 20 \times 20 = 400 \text{ cm}^2$

● Area of the circle = $\pi r^2 = 3.14 \times 10 \times 10 = 314 \text{ cm}^2$

● Area of shaded part = $400 - 314 = 86 \text{ cm}^2$



In the opposite figure :- A rectangle of length 10 cm , its width 7 cm

And two semicircles. Find the area of the figure in cm^2 .

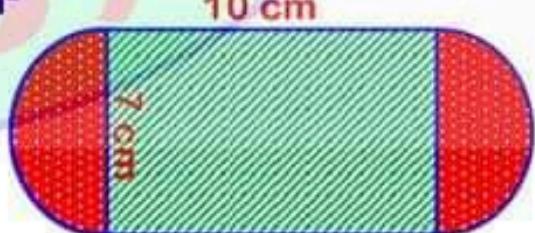
$$(\pi = \frac{22}{7})$$

● Area of the rectangle = $L \times W = 10 \times 7 = 70 \text{ cm}^2$

● Area of the circle = πr^2

$$= \frac{22}{7} \times 3.5 \times 3.5 = 38.5 \text{ cm}^2$$

● Area of shaded part = $70 + 38.5 = 108.5 \text{ cm}^2$



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Choose the correct answer

(1) $(-1)^8 + (-1)^9 = \dots$ (zero or -1 or 1 or 2)

(2) $(-1)^8 - (-1)^9 = \dots$ (zero or -1 or 1 or 2)

(3) If F is an odd number, then the even number from the following is (F^2 or F^2+F or $2F+1$ or F^3)

(4) If zero $\in \{ 5, x-3 \}$, then $x = \dots$ (zero or -5 or 3 or -3)

(5) $(-5)^{\text{zero}} + (5)^{\text{zero}} = \dots$ (zero or -1 or 1 or 2)

(6) If the age of Ahmed is $3x$ years, then his age 3 years ago was ($x+3$ or $x-3$ or $3x-3$ or $3x+3$)

(7) The natural number just next to the number $x+1$ is (x or $x+2$ or $x+3$ or $x-1$)

(8) The preceding integer number to the number $x-1$ is (x or $x+1$ or $x+2$ or $x-2$)

(9) The additive inverse of $(-8)^{\text{zero}}$ is (8 or -8 or 1 or -1)

(10) The additive inverse of $(-1)^3$ is (3 or -1 or 1 or -3)

(11) $3^6 \div 3^3 = \dots$ (6^3 or 3^2 or 27 or 81)

(12) $3^2 + 3^2 + 3^2 = \dots$ (2^3 or 3^3 or 3^6 or 2^6)

(13) $(-3)^3 + (-3)^2 = \dots$ (-18 or $(-3)^5$ or $(-3)^6$ or 18)

(14) The additive inverse of $(-3)^2$ is (9 or 3 or -9 or -3)

(15) Which of the following represents an equation ? ($x-17$ or $22-7 < 15$ or $x > -11$ or $2x+3=7$)

(16) If : $x+2 = |-4|$, then $x = \dots$ (-2 or 2 or -6 or 6)

(17) The set of solution of the equation $2x-1 = -5$ in \mathbb{Z}^- is ({3} or {-3} or {2} or {-2})

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(18) The equation $x^2 + 3 = 4$ is of the degree.

(first or second or third or fourth)

(19) The number which satisfies the inequality $x - 2 > 3$ is

(3 or 4 or 5 or 6)

(20) All the following numbers satisfy the inequality $x > -3$ except

(zero or -1 or -2 or -4)

(21) If : $x + 3 = 8$, $x \in \mathbb{Z}^-$, then solution set is ($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

(22) The number which if it is add to its double the result will be 9 is

(2 or 3 or 4 or 5)

(23) The set of solution of the equation: $x + 3 = 5$ in \mathbb{Z} is

($\{-8\}$ or $\{-2\}$ or $\{2\}$ or $\{8\}$)

(24) The set of solution of the equation: $4x = -16$ in \mathbb{N} is

(\emptyset or $\{-4\}$ or {zero} or $\{4\}$)

(25) The set of solution of the equation: $2x + 3 = 3$ in \mathbb{Z} is

($\{3\}$ or $\{-6\}$ or $\{-3\}$ or {zero})

(26) The set of solution of the inequality: $2 \leq x < 3$ in \mathbb{Z} is

($\{0\}$ or $\{2\}$ or $\{3\}$ or $\{2, 3\}$)

(27) The set of solution of the inequality: $-1 < x \leq 1$ in \mathbb{Z} is

($\{-1\}$ or $\{0\}$ or $\{-1, 1\}$ or $\{0, 1\}$)

(28) If the set of substitution is $\{1, 2, 3, 4\}$, then the set of solution of the

equation: $x + 6 = 10$ is ($\{1\}$ or $\{2\}$ or $\{3\}$ or $\{4\}$)

(29) The set of solution of the inequality: $-1 < 2x < 1$ in \mathbb{Z} is

($\{-1\}$ or $\{-2\}$ or $\{-4\}$ or $\{0\}$)

(30) The greatest integer which satisfies the inequality: $3 \leq x < 6$ is

(3 or 4 or 5 or 6)

(31) The circumference of the circle = (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

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(32) The area of the circle's surface = (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

(33) Two numbers , one of them is more than the other by 3 , if the smaller number equals ($x - 3$) then the greater number equals.....
($3 - x$ or x or $3x$ or $x + 3$)

(34) The sum of two integer numbers is 7, if one of them is x , then the other number is ($x - 7$ or $7 - x$ or $x + 7$ or $7x$)

(35) A circle of radius length 7 cm , then its circumference = cm
($\pi = \frac{22}{7}$) (49 or 44 or 154 or 22)

(36) A circle of radius length 7 cm , then its area = cm^2 ($\pi = \frac{22}{7}$)
(49 or 44 or 154 or 22)

(37) The surface area of the circle of diameter length 8 cm = $\pi \text{ cm}^2$
(4 or 8 or 16 or 64)

(38) A circle, its diameter length 6 cm, then its surface area = cm^2
(3π or 6π or 9π or 36π)

(39) A circle its area is $25\pi \text{ cm}^2$, then its radius length = cm
(25 or 50 or 125 or 5)

(40) A circle its area is $25\pi \text{ cm}^2$, then its diameter length = cm
(100 or 50 or 10 or 5)

(41) The surface area of the circle of radius length 7 cm = $\pi \text{ cm}^2$
(7 or 14 or 49 or 154)

(42) If the circumference of the circle = $20\pi \text{ cm}$, then its area = $\pi \text{ cm}^2$
(100 or 200 or 300 or 400)

(43) A circle its area is $49\pi \text{ cm}^2$, then its radius length = cm
(7 or 14 or 21 or 28)

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(44) The lateral area of the cube = Area of one face x

(2 or 3 or 4 or 6)

(45) The total area of the cube = Area of one face x

(2 or 3 or 4 or 6)

(46) The lateral area of the cuboid = the perimeter of the base x

(height or width or length or volume)

(47) The lateral area of the cuboid with length is 3 cm , width is 2 cm and height is 4 cm = cm² (20 or 24 or 40 or 52)

(48) The lateral area of the cuboid with square base of length is 8 cm and the height is 5 cm = cm² (40 or 80 or 160 or 240)

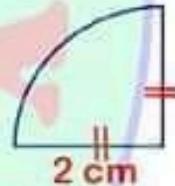
(49) The total area of the cuboid with length is 12 cm , width is 6 cm and height is 4 cm. = cm² (216 or 36 or 360 or 288)

(50) The total area of the cuboid = 32 cm² and its lateral area = 12 cm², then the area of one of its base = cm² (32 or 20 or 18 or 10)

(51) A cuboid its dimensions base are 4 cm and 3 cm and its lateral area = 140 cm² , then its volume = cm³ (1680 or 120 or 168 or 60)

(52) The perimeter of the opposite figure = cm

(2π or 5π or $\pi + 4$ or $4\pi + 4$)



(53) The area of the opposite figure = cm²

(16π or 4π or 2π or $4\pi^2$)



(54) The area of one face of the cube = of its lateral area

($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{1}{6}$)

(55) The area of one face of the cube = of its total area

($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{1}{6}$)

(56) The perimeter of the base cube is 28 cm , then its lateral area = cm²

(112 or 196 or 294 or 7)

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(57) The sum of the edge length of a cube equals 120 cm , then its total area = cm² (100 or 200 or 400 or 600)

(58) The total area of a cube is 486 cm² , then its lateral area = cm² (81 or 324 or 27 or 243)

(59) The lateral area of a cube is 100 cm² , then its total area = cm² (25 or 50 or 125 or 150)

(60) The volume area of a cube is 1000 cm³ , then its lateral area = cm² (10 or 100 or 400 or 600)

(61) The perimeter of the base of a cuboid = 32 cm and its height = 10 cm , then its lateral area = cm² (160 or 320 or 32 or 3200)

(62) The circumference of the circle = $\pi \times$ (diagonal or side or diameter or radius)

(63) The circumference of the circle = $2 \times \pi \times$ (diagonal or side or diameter or radius)

(64) A cuboid shaped box with a square base its length is 9 cm and its height is 20 cm , then its lateral area = cm² (180 or 360 or 540 or 720)

(65) If the lateral area of a cube is 36 cm² , then its total area = cm² (9 or 27 or 45 or 54)

(66) If the total area of a cube is 72 cm² , then its lateral area = cm² (12 or 24 or 36 or 48)

(67) A cube without a lid its edge length is 10 cm , then its total area = cm² (100 or 400 or 500 or 600)

(68) The area of one face of the cube whose lateral area = 400 cm² is cm² (25 or 50 or 100 or 150)

(69) The edge length of the cube whose total area = 600 cm² is cm (10 or 25 or 50 or 100)

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(70) The perimeter of the base cube is 36 cm , then its **lateral area** = cm²
 (9 or 81 or 324 or 546)

(71) A cube of edge length 6 cm , then its **lateral area** = cm²
 (24 or 36 or 144 or 216)

(72) A cube of edge length 5 cm , then its **total area** = cm²
 (25 or 100 or 125 or 150)

(73) The perimeter of one face of a cube = 12 cm , then its **total area** = cm²
 (9 or 27 or 36 or 54)

(74) The **lateral area** of a cube = 100 cm² , then its **volume** = cm³
 (5 or 25 or 125 or 150)

(75) The **sum of the edge** of a cube = 24 cm, then **lengths its total area**
 = cm² (2 or 4 or 16 or 24)

(76) The ratio between the **area of one face of a cube** and its **lateral area**
 = (1:1 or 1:4 or 1:6 or 2:3)

(77) The ratio between the **area of one face of a cube** and its **total area**
 = (1:1 or 1:4 or 1:6 or 2:3)

(78) The ratio between the **area of any two faces of a cube** =
 (1:1 or 1:4 or 1:6 or 2:3)

(79) The ratio between the **lateral area of a cube** and its **total area** =
 (1:1 or 1:4 or 1:6 or 2:3)

(80) The **lateral area** of a cuboid = 160 cm² and dimensions base are 3 cm. and
 7 cm , then its **height** = cm (6 or 8 or 10 or 16)

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Choose the Correct Answer:

1. $(-1)^8 + (-1)^9 = \dots$ (zero or -1 or 1 or 2)

2. The circumference of the circle = $\dots \times \pi$ (r or 2r or r^2 or $r+2$)

3. $\frac{2^3 \times 2^5}{2^2} = \dots$ 2^6

4. $2^5 \times 2^2 = \dots$ (2⁷ or 4⁷ or 1)

5. The surface area of a circle = $\pi \times \dots$ (r or r^2 or 2r)

6. $(-5)^2 \times (2)^2 = \dots$ (10⁰ or 10 or (10)² or (10)³)

7. The sum of edge lengths of a cube is 84 cm. , then its lateral area equals 196 cm²

8. $\frac{1}{3}, \frac{2}{3}, 1, \frac{4}{3}, \dots, \frac{5}{3}, \dots, 2$ (in the same pattern)

9. The surface area of the circle = \dots (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

10. If the lateral area of a cube is 36 cm² , then its total area = \dots cm² (144 or 81 or 54 or 96)

11. $(-1)^3 + 2 = \dots$ (3 or -1 or -3 or 1)

12. 1 , 4 , 7 , 10 , $\dots, 13, \dots, 16$ (in the same pattern)

13. A cuboid its lateral area 120 cm² and the perimeter of its base 20 cm. , then its height = 6 cm.

14. $\frac{8^3 \times 8^4}{8^7} = \dots$ $3^0 = 1$

15. $5^2 \times 2^2 = \dots$ (5⁴ or 2⁴ or 10² or 10⁴)

16. $\{(-1)^{\text{zero}}, (\text{zero})^2\} \dots \mathbb{Z}$ (\in or \notin or \subset or $\not\subset$)

17. $(5)^{\text{zero}} = \dots$ (zero or 5 or 1 or 50)

18. The sum of edge lengths of a cube is 96 cm. , then its lateral area = 256 cm²

19. 25 , 21 , 17 , 13 , $\dots, 9, \dots, 5$ (in the same pattern)

20.	$(-1)^2 - 1 = \dots$	0
21.	$3^5 \div 3^2 = \dots$	(3^7 or 3^{10} or 3^3 or 3^3)
22.	$9^2 \dots (-3)^4$	($>$ or $<$ or $=$ or \geq)
23.	A circle is of diameter length 10 cm. , then its area = \dots cm 2	(50 or 100 or 78.5 or 25)
24.	$\frac{1}{3}, \frac{1}{6}, \frac{1}{12}, \frac{1}{24}, \dots, \frac{1}{48}, \dots$ (in the same pattern)	$\frac{1}{96}$
25.	$(-100)^{\text{zero}} = \dots$	(-100 or 100 or zero or 1)
26.	The lateral area of the cube = area of one face $\times \dots$	(6 or 5 or 4 or 3)
27.	$9^7 \div 9^5 = \dots$	(9^{-12} or 9^2 or 9^{zero} or 9^{35})
28.	The next number in the pattern : 2 , 3 , 5 , 8 , 13 is \dots	(18 or 19 or 20 or 21)
29.	A circle of diameter length 8 cm. , then its area = $\dots \pi$ cm 2	4
		(4 or 8 or 16 or 64)
30.	$(-19)^0 + (19)^0 = \dots$	(-1 or zero or 1 or 2)
31.	The height of the cuboid whose lateral area is 160 cm 2 and the dimensions of its base are 3 cm. and 7 cm. equals \dots cm.	(6 or 8 or 10 or 16)
32.	A cube the perimeter of its base is 36 cm. , then its lateral area = \dots cm 2	(9 or 324 or 36 or 486)
33.	$(-1)^{104} + (-1)^{103} = \dots$	(0 or 2 or -1 or 1)
34.	$3^2 + 3^2 + 3^2 = \dots$	(2^6 or 4^6 or 3^3 or 2^9)
35.	The lateral area of the cuboid whose length is 6 cm. and width is 4 cm. and its height is 5 cm. equals \dots	120
36.	A circle of diameter length 14 cm. , then its area = \dots cm 2 ($\pi = \frac{22}{7}$)	154
37.	If $a = 3$, $b = -2$, then $3ab = \dots$	-18
38.	$-9^3 \dots (-3)^2$	($<$ or = or $>$ or \geq)

39.	The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is bcm (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)
40.	Half the T.S.A. of a cube whose sum of its edge lengths is 36 cm. is cm^2 (108 or 27 or 54 or 18)
41.	The ratio between the T.S.A. and L.S.A. of the cube is $3:2$
42.	$(-1)^{12} + (-1)^{13} = \dots$ (0 or 1 or 2 or -1)
43.	$5 \times 5^2 = \dots$ (25^2 or 25^3 or 5^2 or 5^3)
44.	A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$) (22 or 11 or 7 or 14)
45.	A cube of edge length 6 cm. , then its lateral area = cm^2 (216 or 180 or 144 or 108)
46.	The lateral area of the cube = Area of one face $\times \dots$ (2 or 4 or 6 or height)
47.	$\frac{(-5)^3 \times (-5)^2}{(-5)^4} = -5$
48.	$(-1)^2 \times 2^3 = \dots$ (2^5 or 8 or -8 or -2^5)
49.	The lateral area of a cube whose side length is 3 cm. = cm^2 (27 or 48 or 36 or 54)
50.	$2^6 \times 2^4 = \dots$ (2^2 or 2^{12} or 2^{10} or 2^{24})
51.	$3^7 \div 3^7 = \dots$ 1
52.	A circle , its diameter length is 14 cm. , then its area = 154 cm^2 ($\pi = \frac{22}{7}$)
53.	A cuboid whose length is 9 cm. , width is 7 cm. and its height is 10 cm. , then its lateral area = 320 cm^2
54.	If the radius length of a circle is 10 cm. , then its surface area = cm^2 (Given that : $\pi = 3.14$) (3.14 or 31.4 or 314 or 3140)
55.	If the edge length of a cube is 6 cm. , then its total area = cm^2 (24 or 36 or 144 or 216)
56.	$(3)^7 \div (3)^4 = \dots$ ($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)
57.	If the area of one face of a cube equal 9 cm^2 , then its total area = 54 cm^2

58. The perimeter of one face of a cube is 12 cm. , then its total area = **54** cm²

59. $(-5)^2 \times (2)^2$ = (10^0 or 10 or **10^2** or 10^3)

60. $27 \div (-3)^2$ = (-9 or 24 or **3** or 81)

61. $(-6)^2$ - 12 (**>** or = or < or \leq)

62. A circle , its diameter length is 20 cm. , then its area = **100** cm² ($\pi = 3.14$) (31.4 or **314** or 23.14 or 43.14)

63. $2 - (-3)^0$ = (5 or 3 or **1** or 2)

64. The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm² (16 or 36 or 4 or **24**)

65. The additive inverse of $(-3)^2$ is (9 or 3 or -3 or **-9**)

66. If the total area of the cube = 54 cm² , then the area of one face = cm² (4 or 5 or 8 or **9**)

67. The total area of the cube = Area of one face \times (2 or 4 or **6** or 8)

68. $2^5 \times 2^2$ = (**27** or 2^4 or 2^3 or 1)

69. A circle , its radius length is 4 cm. , then its area = π cm² (4 or 8 or 12 or **16**)

70. $(-1)^8 + (-1)^9 + (-1)^{\text{zero}}$ = (zero or -1 or **1** or 2)

71. The height of a cuboid whose lateral area is 160 cm² and dimensions of its base are 7 cm. and 3 cm. = **8** cm.

72. The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm² (20 or 24 or **40** or 52)

73. A cube of edge length 6 cm. , then its total area = cm² (36 or 72 or 144 or **216**)

74. The perimeter of the base of the cuboid is 10 cm. , its height is 4 cm. , then its lateral area = **40** cm²

75. The total surface area of a cuboid = 100 cm² and area of one base 20 cm² , then its lateral surface area = cm² (40 or **60** or 80 or 140)

76. The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = **40** cm²

Choose the correct answer:

1. The area of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

2. The circumference of the circle =
(πr or $2\pi r$ or πr^2 or $2\pi r^2$)

3. A circle, its diameter length is 10 cm., then its area = cm².
(10π or 5π or $15\pi^2$ or 25π)

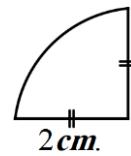
4. The circumference of a circle is 44 cm., then the length of its diameter is cm. ($\pi = \frac{22}{7}$)
(14 or 22 or 44 or 154)

5. A circle with radius length = 1 cm., then its area = cm².
(π or 2π or $\frac{1}{2}\pi$ or π^2)

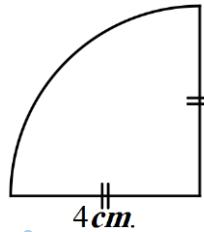
6. The area of the circle with diameter of length 7 cm.
equals cm².
(49π or $49\pi^2$ or 14π or 12.25π)

7. A circle its radius 3.5 cm., then the surface area = cm².
(where $\pi = \frac{22}{7}$)
(11 or 22 or 38.5 or $38\frac{1}{8}$)

8. The perimeter of the opposite figure = cm.
(2π or 5π or $\pi + 4$ or $4\pi + 4$)



9. The area of the opposite figure = cm^2 .
 (16 π or 4 π or 2 π or 4 π^2)



10. A cube of side length 4 cm., then its lateral area = cm^2 .
 (32 or 64 or 84 or 96)

11. A cube whose edge length is 6 cm., then its total area = cm^2 .
 (24 or 36 or 144 or 216)

12. The total area of a cube is 150 cm^2 , then its edge length = cm.
 (3 or 4 or 5 or 6)

13. If the total area of a cube is 24 cm^2 .then its volume = cm^3 .
 (8 or 2 or 4 or 16)

14. The lateral area of a cuboid with base in the shape of a square with Side length 8 cm. and the height of the cuboid is 5 cm. = cm^2 .
 (40 or 80 or 160 or 240)

15. A cube-shaped box, without a lid, has faces.
 (8 or 4 or 5 or 6)

16. The area of one face of the cube = its total area.
 ($\frac{1}{2}$ or $\frac{1}{8}$ or $\frac{1}{6}$ or $\frac{1}{4}$)

17. If the perimeter of one face of a cube = 4 cm., then its total area = cm^2 .
 (3 or 4 or 5 or 6)

18. If the total area of a cuboid = 32 cm^2 . and its lateral area = 12 cm^2 ., then the area of one of its bases = cm^2 .
(32 or 20 or 18 or 10)

19. A cube without a lid of edge length 3 cm., then its total area =
(54 or 45 or 36 or 9)

20. If the edge length of a cube equals the side length of an equilateral triangle whose perimeter is 18 cm., then the lateral area of this cube = cm^2 .
(36 or 144 or 180 or 216)

21. The dimensions of a base of a cuboid are 4 cm. and 3 cm. and its lateral area = 140 cm^2 ., then its volume = cm^3 .
(1680 or 120 or 168 or 60)

22. A case in the shape of a cube without a lid. Its lateral area = 20 cm^2 ., then the area of the faces of the cube equals
(5 cm^2 . or 25 cm^2 . or 30 cm^2 . or 40 cm^2 .)

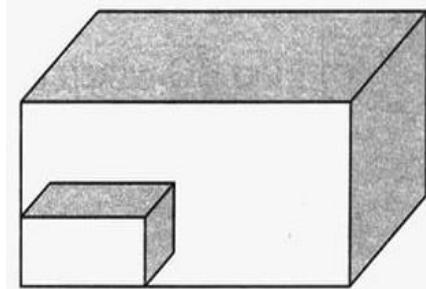
23. If the perimeter of one face of a cube equals 12 cm. then its lateral equals
(27 cm^2 . or 36 cm^2 . or 48 cm^2 . or 54 cm^2 .)

24. The height of a cuboid whose total area is 400 cm^2 . and its base is squared form of the side length = 10 cm. equal
(4 cm. or 5 cm. or 10 cm or 12 cm.)

25. If each dimension of a cuboid is doubled in length, then the ratio between its total area and the new total area equals

1:2 or 1:4

1:8 or 1:16



26. A cuboid in which: the lateral area 120 cm^2 . and the dimensions of its base are 4 cm. and 6 cm., then its height =
 $(5 \text{ cm. or } 6 \text{ cm. or } 2.5 \text{ cm. or } 12 \text{ cm.})$

27. A cuboid of (the length = 3 cm. the width = 2 cm. and the height = 4 cm.), then its lateral area = cm^2 .

(20 or 24 or 40 or 52)

28. The area of the circle's surface =

(πr or πr^2 or $2\pi r$ or $2\pi r^2$)

29. $2^6 \times 2^2 =$

(2^3 or 2^4 or 2^8 or 2^{12})

30. $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$

(with the same pattern)

($\frac{1}{32}$ or $\frac{1}{64}$ or $\frac{1}{128}$ or $\frac{1}{256}$)

31. $(-5)^2 < \dots$

(($-2)^5$ or -5×2 or $-5 \times (-2)$ or 2^5)

32. $3^7 \div 3^7 =$

(zero or 1 or 3 or 7)

33. $3^2 + 3^2 + 3^2 =$

(2^6 or 4^6 or 3^3 or 2^9)

34. $6 \div 3 \times 2 - 1 =$

(1 or 2 or 3 or 4)

35. $(-3)^2 = \dots$ (-9 or -6 or 6 or 9)

36. $2^3 \div 2^2 = \dots$ (2 or 8 or 16 or 32)

37. $(2)^6 \div (-2)^4 = \dots$ (-2¹⁰ or -2² or 2² or 2¹⁰)

38. $(-10)^{\text{zero}} = \dots$ (-10 or -1 or 1 or 10)

39. $2^6 \times 2^2 = \dots$ (2³ or 2⁴ or 2⁸ or 2¹²)

40. $3^7 \div 3^4 = \dots$ (6³ or 3⁵ or 27 or 9)

41. $\frac{6^4 \times 6^5}{6^7} = \dots$ (16 or 24 or 36 or 26)

42. $(3)^0 + (-3)^0 = \dots$ (6 or 0 or 1 or 2)

43. $2^2 + 2 = \dots$ (6 or 8 or 2³ or 4³)

44. $3^3 - 3^2 = \dots$ (3 or 3⁵ or 3⁶ or 18)

45. $2^3 + 2^2 = \dots$ (10 or 12 or 32 or 64)

46. $3^2 + 3^2 + 3^2 = \dots$ (3^6 or 9^6 or 3^3 or 2^9)

47. $(-5)^2 + 5 = \dots$ (5^2 or 20 or 15 or 30)

48. $(-1)^3 + (-1)^4 = \dots$ (0 or -1 or 2 or -2)

49. $\frac{7^5}{7^4} + 1 = \dots$ (7 or 1 or 8 or 7^2)

50. $(-2)^{20} \div 2^{15} = \dots$ (2^5 or $(-2)^5$ or 2^{35} or $(-2)^{35}$)

51. $2^8 \div 2^4 = \dots$ (2^{12} or 2^2 or 2×2^3 or 8)

52. If $3^5 \div 3^a = 3^0$, then $a = \dots$ (4 or 5 or 0 or -5)

53. A cube of edge length 6cm, then the lateral area = (36 or 144 or 6 or 18)

54. A cube of edge length 8cm, then total area = (64 or 8 or 384 or 300)

55. The total area of a cube whose face area is 49cm^2 =
(49 or 7 or 21 or 294)

56. If the lateral area of a cube is 36 cm^2 then its total area =
(9 or 36 or 54 or 18)

57. If sum of edge lengths of a cube is 84cm then lateral area =
(49 or 7 or 196 or 84)

58. A circle its circumference is 44 cm then its area = ($\pi = \frac{22}{7}$)
(7 or 49π or 77 or 22)

59. Area of a circle of radius length 7cm ($\pi = \frac{22}{7}$)
(22 or 44 or 154 or 56)

60. The lateral area of the cuboid = the perimeter of the base \times
(height or width or length or volume)

61. The lateral area of the cuboid with length is 3 cm., width is 2cm. and height is 4cm. = cm^2 .
(20 or 24 or 40 or 52)

62. The total area of the cuboid with length is 12cm., width is 6cm. and height is 4 cm. = cm^2 .
(216 or 36 or 360 or 288)

63. The height of the cuboid whose lateral area is 120cm^2 . and the dimensions of its base are 6cm. and 4cm. = cm.
(5 or 6 or 12 or 2.5)

64. The equation $x^2 + 3 = 4$ is of degree.
(first or second or third or fourth)

65. The number which satisfies the inequality: $x < -1$ is
(zero or 1 or 2 or -2)

66. All the following numbers satisfy the inequality: $x > -3$
except.....
(zero or -4 or -1 or -2)

67. The greatest integer that satisfies the inequality: $x < 6$ is.....
(3 or 5 or 8 or 6)

68. The number that satisfies the inequality: $x - 2 > 3$ is.....
(3 or 4 or 5 or 6)

69. The number -5 is a solution to the equation where the
Substitution set is \mathbb{Z}
$$(x - 3 = 2 \quad \text{or} \quad 2x - 1 = 9)$$

$$-2x + 3 = 13 \quad \text{or} \quad x + 3 = 2x + 12)$$

70. If 3 is a solution to the equation: $2x - 4 = a$, then $a =$
(3 or 2 or -2 or -3)

71. The set of substitution is $\{1, 2, 3, 4\}$, then the set of solution
of the equation $x + 6 = 10$ is
({1} or {2} or {3} or {4})

72. If the substitution set is $\{2, -1, 3, 4\}$, then the solution set of
the equation: $2x + 3 = 3$ is
({0} or {-1} or {3} or \emptyset)

73. The solution set of the equation $x + 5 = 2$ in \mathbb{Z} is {.....}
(7 or -7 or 3 or -3)

74. If $x + 3 = 5$, $x \in \mathbb{Z}$ then the solution set is

($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

75. If zero $\in \{5, x - 3\}$, then $x =$

(zero or -5 or 3 or -3)

76. The solution set for the equation $2x - 1 = -5$ in \mathbb{Z} is

($\{-3\}$ or $\left\{\frac{-1}{2}\right\}$ or $\{3\}$ or $\{-2\}$)

77. If $3x + 9 =$ zero, then the solution set of the equation in \mathbb{Z} is

($\{9\}$ or $\{-9\}$ or $\{3\}$ or $\{-3\}$)

78. The S.S. of the equation $4x = -16$ in \mathbb{N} is

(\emptyset or $\{-4\}$ or $\{0\}$ or $\{4\}$)

79. If $x + 2 = |-4|$, then $x =$

(-2 or 2 or -6 or 6)

80. If $|-4| x = 64$, then $x =$

(-16 or 16 or 6 or 8)

81. If $2x = 2$, then $3x - 1 =$

(2 or 3 or 4 or 5)

82. If $2x = 0$, then $x =$

(2 or 3 or 5 or zero)

83. If $\frac{x}{5} = 4$, then $x =$

(1 or 9 or 20 or -1)

84. If $2a + b = 10$, then $3a + b = \dots$ (5 or 6 or 15 or 30)

85. If $5x + 8x + 2x + 4x = 114$, then $5x + 3 = \dots$ (33 or 35 or 47 or 8x)

86. The solution set of the equation: $x + 3 = 12$ is equal to the solution set of the equation
 $(x - 3 = -12 \text{ or } x + (-3) = 12)$
 $x - (-3) = 12 \text{ or } x - (-3) = -12)$

87. The solution set of the inequality: $x > 0$ in \mathbb{Z} is (\mathbb{Z} or \mathbb{Z}^+ or \mathbb{Z}^- or \mathbb{N})

88. The S.S. of the inequality: $-2x < 0$ in \mathbb{Z} is (\emptyset or \mathbb{N} or \mathbb{Z}^- or \mathbb{Z}^+)

89. If $x \in \mathbb{N}$, Then the S.S. of the inequality: $-x > 3$ is ($\{4, 5, 6, \dots\}$ or $\{-4, -5, -6, \dots\}$ or $\{-3\}$ or \emptyset)

90. The S.S. of the inequality: $2x + 1 \leq 5$ in \mathbb{N} is
 $(\{2, 1, 0, -1, -2, \dots\} \text{ or } \{2, 1, 0\})$
 $\{1, 0, -1, -2, \dots\} \text{ or } \{1, 0\}$

91. If $2x + 5 > 3$ and $x \in \mathbb{Z}$, then the solution set = (\mathbb{N} or $\mathbb{N} - \{0\}$ or \mathbb{Z}^- or \mathbb{Z}^+)

92. The S.S. of the inequality: $4 - x > 3$ in \mathbb{Z}^+ is ($\{0, -1, -2, -3, \dots\}$ or $\{0, 1, 2, 3, \dots\}$ or $\{0\}$ or \emptyset)

93. The S.S. of the inequality: $-1 \leq x < 1$ in \mathbb{Z} is ($\{0, -1\}$ or $\{0, 1\}$ or $\{0\}$ or $\{1\}$)

94. The solution set of the inequality: $2 \leq x < 3$ where $x \in \mathbb{N}$ is
({zero} or {2} or {3} or {2, 3})

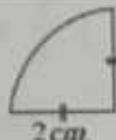
95. If $x > 5$, then: $-x$
(< -9 or ≥ -5 or < -5 or > -5)

96. The greatest integer that satisfies the inequality: $3 \leq x < 6$
is
(3 or 4 or 5 or 6)

97. 2 belongs to the S.S. of the inequality:, where $x \in \mathbb{Z}$
($x > 2$ or $x < 2$ or $-x > -3$ or $-x > 3$)

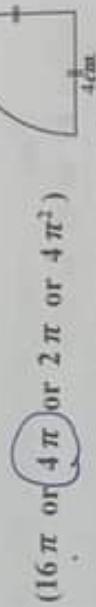
Choose the correct answer:

1. The area of the circle =
(πr or πr^2 or $2\pi r$ or $2\pi r^2$)
2. The circumference of the circle =
(πr or $2\pi r$ or πr^2 or $2\pi r^2$)
3. A circle, its diameter length is 10 cm., then its area = cm².
(10π or 5π or $15\pi^2$ or 25π)
4. The circumference of a circle is 44 cm., then the length of its diameter is cm. ($\pi = \frac{22}{7}$)
(14 or 22 or 44 or 154)
5. A circle with radius length = 1 cm., then its area = cm².
(π or 2π or $\frac{1}{2}\pi$ or π^2)
6. The area of the circle with diameter of length 7 cm.
equals cm². (49 π or 49 π^2 or 14 π or 12.25 π)
7. A circle its radius 3.5 cm., then the surface area = cm².
(where $\pi \frac{22}{7}$) (11 or 22 or 38.5 or 38 $\frac{1}{8}$)
8. The perimeter of the opposite figure = cm.
(2π or 5π or $\pi + 4$ or $4\pi + 4$)



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9. The area of the opposite figure = cm².



(16π or 4π or 2π or $4\pi^2$)

10. A cube of side length 4 cm., then its lateral area = cm².

(32 or 64 or 84 or 96)

11. A cube whose edge length is 6 cm., then its total area = cm².

(24 or 36 or 144 or 216)

12. The total area of a cube is 150 cm², then its edge length = cm.

(3 or 4 or 5 or 6)

13. If the total area of a cube is 24 cm², then its volume = cm³.

(8 or 2 or 4 or 16)

14. The lateral area of a cuboid with base in the shape of a square with Side length 8 cm. and the height of the cuboid is 5 cm. = cm².

(40 or 80 or 160 or 240)

15. A cube-shaped box, without a lid, has faces.

(8 or 4 or 5 or 6)

16. The area of one face of the cube = its total area.

($\frac{1}{2}$ or $\frac{1}{8}$ or $\frac{1}{6}$ or $\frac{1}{4}$)

17. If the perimeter of one face of a cube = 4 cm., then its total area = cm².

(3 or 4 or 5 or 6)

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18. If the total area of a cuboid = 32 cm^2 , and its lateral area = 12 cm^2 , then the area of one of its bases = cm^2 .
(32 or 20 or 18 or 10)

19. A cube without a lid of edge length 3 cm., then its total area =
(54 or 45 or 36 or 9)

20. If the edge length of a cube equals the side length of an equilateral triangle whose perimeter is 18 cm., then the lateral area of this cube = cm^2 .
(36 or 144 or 180 or 216)

21. The dimensions of a base of a cuboid are 4 cm. and 3 cm. and its lateral area = 140 cm^2 , then its volume = cm^3 .
(1680 or 120 or 168 or 60)

22. A case in the shape of a cube without a lid. Its lateral area = 20 cm^2 , then the area of the faces of the cube equals
(5 cm^2 , or 25 cm^2 , or 30 cm^2 , or 40 cm^2)

23. If the perimeter of one face of a cube equals 12 cm, then its lateral equals
(27 cm^2 , or 36 cm^2 , or 48 cm^2 , or 54 cm^2)

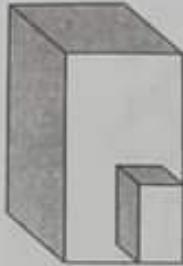
24. The height of a cuboid whose total area is 400 cm^2 , and its base is squared form of the side length = 10 cm, equal
(4 cm. or 5 cm. or 10 cm or 12 cm.)

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25. If each dimension of a cuboid is doubled in length, then the ratio between its total area and the new total area equals
 1:2 or 1:4
 1:8 or 1:16



26. A cuboid in which: the lateral area 120 cm^2 , and the dimensions of its base are 4 cm. and 6 cm., then its height =
 (5cm. or 6cm or 2.5cm or 12cm.)

27. A cuboid of (the length = 3 cm. the width = 2 cm. and the height = 4 cm.), then its lateral area = cm².
 (20 or 24 or 40 or 52)

28. The area of the circle's surface =
 (πr or πr^2 or $2\pi r$ or $2\pi r^2$)

29. $2^6 \times 2^2 =$
 (2^3 or 2^4 or 2^8 or 2^{12})

30. $\frac{1}{2} \times \frac{1}{4} \times \frac{1}{8} \times \frac{1}{16} \times$
 (with the same pattern)
 ($\frac{1}{32}$ or $\frac{1}{64}$ or $\frac{1}{128}$ or $\frac{1}{256}$)

31. $(-5)^3 =$
 ($(-2)^5$ or -5×2 or $-5 \times (-2)$ or 2^5)

32. $3^3 + 3^7 =$
 (zero or 1 or 3 or 7)

33. $3^2 + 3^2 + 3^2 =$
 (2^6 or 4^6 or 3^3 or 2^9)

34. $6 \div 3 \times 2 - 1 =$
 (1 or 2 or 3 or 4)

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35. $(-3)^2 = \dots$

(-9 or -6 or 6 or 9)

36. $2^3 \div 2^2 = \dots$

(2 or 8 or 16 or 32)

37. $(2)^6 \div (-2)^4 = \dots$

(-2¹⁰ or -2² or 2² or 2¹⁰)

38. $(-10)^0 = \dots$

(-10 or -1 or 0 or 10)

39. $2^6 \times 2^2 = \dots$

(2⁸ or 2⁴ or 2⁸ or 2¹²)

40. $3^7 \div 3^4 = \dots$

(6³ or 3⁵ or 27 or 9)

41. $\frac{6^4 \times 6^5}{6^7} = \dots$

(16 or 24 or 36 or 26)

42. $(3)^0 + (-3)^0 = \dots$

(6 or 0 or 1 or 2)

43. $2^1 + 2 = \dots$

(6 or 8 or 2³ or 4³)

44. $3^3 - 3^2 = \dots$

(3 or 3⁵ or 3⁶ or 18)

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45. $2^3 + 2^2 = \dots$

46. $3^2 + 3^2 + 3^2 = \dots$

47. $(-5)^2 + 5 = \dots$

48. $(-1)^3 + (-1)^4 = \dots$

49. $\frac{7^5}{7^4} + 1 = \dots$

50. $(-2)^{20} + 2^{15} = \dots$

51. $2^8 \div 2^4 = \dots$

52. If $3^5 + 3^4 = 3^0$, then $a = \dots$

53. A cube of edge length 6cm, then the lateral area =

54. A cube of edge length 8cm, then total area =

64 or 8 or 384 or 300)

(10 or 12 or 32 or 64)

(3⁶ or 9⁶ or 3³ or 2⁹)

(5⁷ or 20 or 15 or 30)

(0 or -1 or 2 or -2)

(7 or 1 or 8 or 7²)

(2⁵ or (-2)⁵ or 2³⁵ or (-2)³⁵)

(2¹² or 2² or 2² × 2³ or 8)

(4 or 5 or 0 or -5)

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55. The total area of a cube whose face area is 49cm^2 =
(49 or 7 or 21 or 294)

56. If the lateral area of a cube is 36 cm^2 then its total area =
(9 or 36 or 54 or 18)

57. If sum of edge lengths of a cube is 84cm then lateral area =
(49 or 7 or 196 or 84)

58. A circle its circumference is 44cm then its area =
 $(\pi = \frac{22}{7})$ or 154

59. Area of a circle of radius length 7cm $(\pi = \frac{22}{7})$
(7 or 49 or 77 or 22)
(22 or 44 or 154 or 56)

60. The lateral area of the cuboid = the perimeter of the base \times
(height or width or length or volume)

61. The lateral area of the cuboid with length is 3 cm., width is 2cm. and height is 4cm. = cm^2 .
(20 or 24 or 40 or 52)

62. The total area of the cuboid with length is 12cm., width is 6cm. and height is 4 cm. = cm^2 .
(216 or 36 or 360 or 288)

63. The height of the cuboid whose lateral area is 120cm^2 . and the dimensions of its base are 6cm. and 4cm. = cm.
(5 or 6 or 12 or 2.5)

64. The equation $x^2 + 3 = 4$ is of degree.
(first or **second** or third or fourth)

65. The number which satisfies the inequality: $x < -1$ is
(zero or 1 or 2 or **-2**)

66. All the following numbers satisfy the inequality: $x > -3$
except.....
(zero or **-4** or -1 or -2)

67. The greatest integer that satisfies the inequality: $x < 6$ is.....
(3 or **5** or 8 or 6)

68. The number that satisfies the inequality: $x - 2 > 3$ is.....
(3 or 4 or 5 or **6**)

69. The number -5 is a solution to the equation where the
Substitution set is \mathbb{Z}
 $(x - 3 = 2 \quad \text{or} \quad 2x - 1 = 9)$
 $-2x + 3 = 13$ or $x + 3 = 2x + 12$)

70. If 3 is a solution to the equation: $2x - 4 = a$, then $a =$
(3 or **2** or -2 or -3)

71. The set of substitution is $\{1, 2, 3, 4\}$, then the set of solution
of the equation $x + 6 = 10$ is
($\{1\}$ or $\{2\}$ or $\{3\}$ or **$\{4\}$**)

72. If the substitution set is $\{2, -1, 3, 4\}$, then the solution set of
the equation: $2x + 3 = 3$ is
($\{0\}$ or $\{-1\}$ or $\{3\}$ or **\emptyset**)

73. The solution set of the equation $x + 5 = 2$ in \mathbb{Z} is $\{.....\}$
(7 or -7 or 3 or **-3**)

74. If $x + 3 = 5$, $x \in \mathbb{Z}$ then the solution set is

($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

75. If zero $\in \{5, x - 3\}$, then $x =$

(zero or -5 or 3 or -3)

76. The solution set for the equation $2x - 1 = -5$ in \mathbb{Z} is

($\{-3\}$ or $\left\{\frac{-1}{2}\right\}$ or $\{3\}$ or $\{-2\}$)

77. If $3x + 9 =$ zero, then the solution set of the equation in \mathbb{Z} is

($\{9\}$ or $\{-9\}$ or $\{3\}$ or $\{-3\}$)

78. The S.S. of the equation $4x = -16$ in \mathbb{N} is

(\emptyset or $\{-4\}$ or $\{0\}$ or $\{4\}$)

79. If $x + 2 = |-4|$, then $x =$

(-2 or 2 or -6 or 6)

80. If $|-4| \times x = 64$, then $x =$

(-16 or 16 or 6 or 8)

81. If $2x = 2$, then $3x - 1 =$

(2 or 3 or 4 or 5)

82. If $2x = 0$, then $x =$

(2 or 3 or 5 or zero)

83. If $\frac{x}{5} = 4$, then $x =$

(1 or 9 or 20 or -1)

84. If $2 a b = 10$, then $3 a b = \dots$ (5 or 6 or 15 or 30)

85. If $5 x + 8 x + 2 x + 4 x = 114$, then $5 x + 3 = \dots$ (33 or 35 or 47 or 8 x)

86. The solution set of the equation: $x + 3 = 12$ is equal to the solution set of the equation
 $(x - 3 = -12 \text{ or } x + (-3) = 12)$
 $x - (-3) = 12 \text{ or } x - (-3) = -12)$

87. The solution set of the inequality: $x > 0$ in \mathbb{Z} is (\mathbb{Z} or \mathbb{Z}^+ or \mathbb{Z}^- or \mathbb{N})

88. The S.S. of the inequality: $-2 x < 0$ in \mathbb{Z} is (\emptyset or \mathbb{N} or \mathbb{Z}^- or \mathbb{Z}^+)

89. If $x \in \mathbb{N}$, Then the S.S. of the inequality: $-x > 3$ is ($\{4, 5, 6, \dots\}$ or $\{-4, -5, -6, \dots\}$ or $\{-3\}$ or \emptyset)

90. The S.S. of the inequality: $2 x + 1 \leq 5$ in \mathbb{N} is ($\{2, 1, 0, -1, -2, \dots\}$ or $\{2, 1, 0\}$)
 $\{1, 0, -1, -2, \dots\}$ or $\{1, 0\}$)

91. If $2 x + 5 > 3$ and $x \in \mathbb{Z}$, then the solution set = (\mathbb{N} or $\mathbb{N} - \{0\}$ or \mathbb{Z}^- or \mathbb{Z}^+)

92. The S.S. of the inequality: $4 - x > 3$ in \mathbb{Z}^+ is ($\{0, -1, -2, -3, \dots\}$ or $\{0, 1, 2, 3, \dots\}$ or $\{0\}$ or \emptyset)

93. The S.S. of the inequality: $-1 \leq x < 1$ in \mathbb{Z} is ($\{0, -1\}$ or $\{0, 1\}$ or $\{0\}$ or $\{1\}$)

94. The solution set of the inequality: $2 \leq x < 3$ where $x \in \mathbb{N}$ is
($\{\text{zero}\}$ or $\{2\}$ or $\{3\}$ or $\{2, 3\}$)

95. If $x > 5$, then: $-x$
(< -9 or ≥ -5 or < -5 or > -5)

96. The greatest integer that satisfies the inequality: $3 \leq x < 6$
is
(3 or 4 or 5 or 6)

97. 2 belongs to the S.S. of the inequality: where $x \in \mathbb{Z}$
($x > 2$ or $x < 2$ or $-x > -3$ or $-x > 3$)

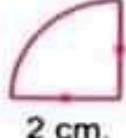
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Choose the correct answer

1	$(-5)^2$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
2	$(-3)^5$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
3	$(-11)^0$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
4	The additive inverse of $(-8)^0$ is	(8 or -8 or 1 or -1)
5	The additive inverse of $(-1)^3$ is	(1 or -1 or 3 or -3)
6	$2^6 \times 2^2 =$	(2^3 or 2^4 or 2^8 or 2^{12})
7	$3^7 \div 3^4 =$	(6^3 or 3^5 or 27 or 9)
8	$\frac{6^4 \times 6^5}{6^7} =$	(16 or 24 or 36 or 26)
9	$(3)^0 + (-3)^0 =$	(6 or 0 or 1 or 2)
10	$2^2 + 2 =$	(6 or 8 or 2^3 or 4^3)
11	$3^3 - 3^2 =$	(3 or 3^5 or 3^6 or 18)
12	$2^3 + 2^2 =$	(10 or 12 or 32 or 64)
13	$3^2 + 3^2 + 3^2 =$	(3^6 or 9^6 or 3^3 or 2^9)
14	$(-5)^2 + 5 =$	(5^2 or 20 or 15 or 30)
15	$(-1)^3 + (-1)^4 =$	(0 or -1 or 2 or -2)
16	$\frac{7^5}{7^4} + 1 =$	(7 or 1 or 8 or 7^2)
17	$(-2)^{20} \div 2^{15} =$	(2^5 or $(-2)^5$ or 2^{35} or $(-2)^{35}$)
18	$2^8 \div 2^4 =$	(2^{12} or 2^2 or 2×2^3 or 8)
19	If $3^5 \div 3^a = 3^0$, then $a =$	(4 or 5 or -5 or 0)
20	$2^6 \times 2^2 =$	
	(a) 2^3 (b) 2^4 (c) 2^8 (d) 2^{12}	
21	$(-5)^2 <$	
	(a) $(-2)^5$ (b) -5×2 (c) $-5 \times (-2)$ (d) 2^5	
22	$3^7 \div 3^7 =$	
	(a) zero (b) 1 (c) 3 (d) 7	
23	$3^2 + 3^2 + 3^2 =$	
	(a) 2^6 (b) 4^6 (c) 3^3 (d) 2^9	

24	$(-3)^2 = \dots$	(a) -9	(b) -6	(c) 6	(d) 9	
25	$2^3 + 2^2 = \dots$	(a) 2	(b) 8	(c) 16	(d) 32	
26	$(2)^6 + (-2)^4 = \dots$	(a) -2^{10}	(b) -2^2	(c) 2^2	(d) 2^{10}	
27	$(-10)^{\text{zero}} = \dots$	(a) -10	(b) -1	(c) 1	(d) 10	
28	$2^3 + 2^2 = \dots$	(a) 10	(b) 12	(c) 32	(d) 64	
29	$2^3 \times 2^3 = \dots$	(a) 2^6	(b) 4^9	(c) 4^6	(d) 2^9	
30	$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$	(a) $\frac{1}{32}$	(b) $\frac{1}{64}$	(c) $\frac{1}{128}$	(d) $\frac{1}{256}$	(with the same pattern)
31	$(-7)^2 \dots \mathbb{N}$					(\in or \notin or \subset or $\not\subset$)
32	The additive inverse of $(-3)^2$ is \dots					(9 or 3 or -3 or -9)
33	$(-9)^2 = \dots$					(-81 or -18 or 81 or 18)
34	$(-1)^8 + (-1)^9 = \dots$					(zero or -1 or 1 or 2)
35	$2^5 \times 2^2 = \dots$					(2^7 or 4^7 or 1)
36	$(-5)^2 \times (2)^2 = \dots$					(10^0 or 10 or $(10)^2$ or $(10)^3$)
37	$27 + (-3)^2 = \dots$					(-9 or 24 or 3 or 81)
38	$(-1)^3 + 2 = \dots$					(3 or -1 or -3 or 1)
39	$(5)^{\text{zero}} = \dots$					(zero or 5 or 1 or 50)
40	$3^5 + 3^2 = \dots$					(3^7 or 3^{10} or 3^3 or 3^2)
41	$9^2 \dots (-3)^4$					($>$ or $<$ or $=$ or \geq)
42	$(-100)^{\text{zero}} = \dots$					(-100 or 100 or zero or 1)
43	$9^7 + 9^5 = \dots$					(9^{-12} or 9^2 or 9^{zero} or 9^{35})
44	$(-19)^0 + (19)^0 = \dots$					(-1 or zero or 1 or 2)
45	$(-1)^{104} + (-1)^{103} = \dots$					(0 or 2 or -1 or 1)
46	$-9^3 \dots (-3)^2$					($<$ or $=$ or $>$ or \geq)
47	$(-1)^{12} + (-1)^{13} = \dots$					(0 or 1 or 2 or -1)

48	$5 \times 5^2 = \dots$	(25^2 or 25^3 or 5^2 or 5^3)
49	$(-1)^2 \times 2^3 = \dots$	(2^5 or 8 or -8 or -2^5)
50	$2^6 \times 2^4 = \dots$	(2^2 or 2^{12} or 2^{10} or 2^{24})
51	$(-1)^8 + (-1)^9 = \dots$	(zero or 1 or -1 or 2)
52	$(3)^7 \div (3)^4 = \dots$	($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)
53	$(-5)^2 \times (2)^2 = \dots$	(10^0 or 10 or 10^2 or 10^3)
54	$27 \div (-3)^2 = \dots$	(-9 or 24 or $3 \frac{3}{7}$ or $\frac{81}{7}$)
55	$(-6)^2 = \dots - 12$	($>$ or $=$ or $<$ or \leq)
56	$2 - (-3)^0 = \dots$	(5 or 3 or 1 or 2)
57	The additive inverse of $(-3)^2$ is \dots	(9 or 3 or -3 or -9)
58	$\frac{1}{7^5} \times 7^5 = \dots 1$	(< or = or > or otherwise)
59	$2^5 \times 2^2 = \dots$	(2^7 or 2^4 or 2^3 or 1)
60	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}} = \dots$	(zero or -1 or 1 or 2)
61	$(-1)^{104} + (-1)^{103} = \dots$	(zero or -1 or 1 or 2)
62	$4^2 = \dots 8$	(> or < or = or otherwise)
63	The number of faces of the cube = \dots faces.	(6 or 8 or 12 or 4)
64	The area of a circle = \dots (πr or πr^2 or $2\pi r$ or $2\pi r^2$)	
65	The circumference of a circle = \dots (πr or $2\pi r$ or πr^2 or $2\pi r^2$)	
66	A circle, its radius length is 3.5 cm. , then the surface area = \dots cm^2 (Consider $\pi = \frac{22}{7}$) (El-Sharkia 2012)	(11 or 22 or 38.5 or $38\frac{1}{8}$)
67	A circle with radius length = 1 cm. , then its area = \dots cm^2 (Ismailia 2011)	(π or 2π or $\frac{1}{2}\pi$ or π^2)
68	The area of the circle whose diameter length is 8 cm. = \dots πcm^2 (El-Menia 2015)	(4 or 8 or 16 or 64)
69	A circle , its diameter length is 6 cm. , then its surface area = \dots cm^2 (Ismailia 2014)	(3π or 6π or 9π or 36π)
70	The circumference of a circle is 44 cm. , then the length of its diameter is \dots cm. (Consider $\pi = \frac{22}{7}$)	(14 or 22 or 44 or 154)
71	The perimeter of the opposite figure = \dots cm. (Souhag 2017)	(2π or 5π or $\pi + 4$ or $4\pi + 4$)



72	The area of the opposite figure = cm^2 (16 π or 4 π or 2 π or 4 π^2)			
73	The lateral area of the cube = Area of one face \times (South Sinai 2013)			
74	(a) 2	(b) 4	(c) 6	(d) 8
74	A cube of side length 4 cm. , then its lateral area = cm^2 (Beni Suef 2012)			
74	(a) 32	(b) 64	(c) 84	(d) 96
75	A cube of edge length 6 cm. , then its total area = cm^2 (Cairo 2017)			
75	(a) 36	(b) 72	(c) 144	(d) 216
76	If the perimeter of one face of a cube = 4 cm. , then its total area = cm^2 (El-Dakahlia 2011)			
76	(a) 3	(b) 4	(c) 5	(d) 6
77	The area of base of a cube is 49 cm^2 , then its lateral area equals cm^2 (A 4 / 7)			
77	(a) 392	(b) 294	(c) 196	(d) 98
78	A cube of total area 150 cm^2 , then the length of its edge is cm. (Luxor 2015)			
78	(a) 5	(b) 6	(c) 15	(d) 10
79	If the total area of a cube is 24 cm^2 , then its volume = cm^3 (El-Fayoum 2012)			
79	(a) 8	(b) 2	(c) 4	(d) 16
80	A cube its lateral area = 36 cm^2 , then its volume = cm^3 (Souhag 2013)			
80	(a) 27	(b) - 27	(c) - 1	(d) \emptyset
81	A cube, its volume is 1000 cm^3 , then its lateral area = cm^2 (Damietta 2016)			
81	(a) 600	(b) 500	(c) 400	(d) 200
82	A cube-shaped box , without a lid , has faces. (a) 4 (b) 5 (c) 6 (d) 8			
83	A cube without a lid of edge length 3 cm. , then its total area = (a) 54 (b) 45 (c) 36 (d) 9			

84	The area of one face of the cube = its total area. (Kafr El-Sheikh 2011)	(a) $\frac{1}{2}$	(b) $\frac{1}{8}$	(c) $\frac{1}{6}$	(d) $\frac{1}{4}$
85	The lateral area of the cuboid = the perimeter of the base \times (Suez 2016)	(a) height	(b) width	(c) length	(d) volume
86	The lateral area of the cuboid with length is 3 cm. , width is 2 cm. and height is 4 cm. = cm ² (El-Beheira 2013)	(a) 20	(b) 24	(c) 40	(d) 52
87	The lateral area of a cuboid with base in the shape of a square with side length 8 cm. and the height of the cuboid is 5 cm. = cm ²	(a) 40	(b) 80	(c) 160	(d) 240
88	The total area of the cuboid with length is 12 cm. , width is 6 cm. and height is 4 cm. = cm ²	(a) 216	(b) 36	(c) 360	(d) 288
89	The height of the cuboid whose lateral area is 120 cm ² and the dimensions of its base are 6 cm. and 4 cm. = cm. (El-Gharbia 2014)	(a) 5	(b) 6	(c) 12	(d) 2.5
90	If the total area of a cuboid = 32 cm ² and its lateral area = 12 cm ² , then the area of one of its bases = cm ²	(a) 32	(b) 20	(c) 18	(d) 10
91	The dimensions of a base of a cuboid are 4 cm. and 3 cm. and its lateral area = 140 cm ² , then its volume = cm ³	(a) 1680	(b) 120	(c) 168	(d) 60
92	The circumference of the circle = $\times \pi$ (r or 2r or r ² or r+2)				
93	The surface area of a circle = $\pi \times$ (r or r ² or 2r)				
94	The sum of edge lengths of a cube is 84 cm. , then its lateral area equals cm ² 5 / 7				
95	The height of the cuboid whose lateral area is 160 cm ² and the dimensions of its base are 3 cm. and 7 cm. equals cm.	(6 or 8 or 10 or 16)			
96	A cube the perimeter of its base is 36 cm. , then its lateral area = cm ² (9 or 324 or 36 or 486)				
97	The area of the circle whose radius length is 2π cm. is cm ² (4 π or 2 π^2 or 12.56 or 4 π^3)				

98	The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (72 cm^2 or 8.4 dm^2 or 84 dm^2 or 84 cm^2)
99	Half the T.S.A. of a cube whose sum of its edge lengths is 36 cm. is cm^2 (108 or 27 or 54 or 18)
10	A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$) (22 or 11 or 7 or 14)
101	A cube of edge length 6 cm. , then its lateral area = cm^2 (216 or 180 or 144 or 108)
102	The lateral area of the cube = Area of one face \times (2 or 4 or 6 or height)
103	The lateral area of a cube whose side length is 3 cm. = cm^2 (27 or 48 or 36 or 54)
104	If the radius length of a circle is 10 cm. , then its surface area = cm^2 (Given that : $\pi = 3.14$) (3.14 or 31.4 or 314 or 3140)
105	If the edge length of a cube is 6 cm. , then its total area = cm^2 (24 or 36 or 144 or 216)
106	The lateral surface area of the cube = area of one face \times (6 or 5 or 4 or 3)
107	The surface area of the circle = (π or πr^2 or $2\pi r$ or $2\pi r^2$)
108	A circle , its diameter length is 20 cm. , then its area = cm^2 ($\pi = 3.14$) (31.4 or 314 or 23.14 or 43.14)
109	The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm^2 (16 or 36 or 4 or 24)
110	If the total area of the cube = 54 cm^2 , then the area of one face = cm^2 (4 or 5 or 8 or 9)
111	The total area of the cube = Area of one face \times (2 or 4 or 6 or 8)
112	A circle , its radius length is 4 cm. , then its area = $\pi \text{ cm}^2$ (4 or 8 or 12 or 16)
113	The sum of edge lengths of a cube is 96 cm. , then its lateral area = cm^2 (8 or 64 or 256 or 384)
114	The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm^2 (20 or 24 or 40 or 52)
115	A cube of edge length 6 cm. , then its total area = cm^2 (36 or 72 or 6 / 7)
116	The area of the circle = $\times \pi$ (r or $2r$ or)
117	A cube of edge length 6 cm. , then its total area = cm^2 (36 or 72 or 144 or 216)

118 A circle, its radius length is 4 cm. , then its area = π cm²
(8 or 16 or 64 or 2 π)

119 The total area of a cube is 324 cm² , then the area of face =
(54 cm² or 81 cm² or 54 cm. or 81 cm.)

120 The surface area of the circle whose diameter length is 20 cm.
= cm² (π = 3.14) (314 or 0.314 or 3.14 or 62.8)

121 If the lateral area of a cube is 36 cm² , then its total area = cm²

122 A circle , its circumference is 88 cm. , then its radius length = cm. (π = $\frac{22}{7}$)
(28 or 24 or 44 or 14)

123 A cube of edge length 6 cm. , then its lateral area = cm²

124 If the perimeter of base of a cube is 24 cm. , then its total area = cm²
(144 or 36 or 54 or 216)

125 The total area of cube = x area of one face
(6 or 2 or 4 or 3)

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Choose the correct answer

1	$(-5)^2$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
2	$(-3)^5$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
3	$(-11)^0$ \mathbb{N}	(\in or \notin or \subset or $\not\subset$)
4	The additive inverse of $(-8)^0$ is	(8 or -8 or 1 or -1)
5	The additive inverse of $(-1)^3$ is	(1 or -1 or 3 or -3)
6	$2^6 \times 2^2 =$	(2^3 or 2^4 or 2^8 or 2^{12})
7	$3^7 \div 3^4 =$	(6^3 or 3^5 or 27 or 9)
8	$\frac{6^4 \times 6^5}{6^7} =$	(16 or 24 or 36 or 26)
9	$(3)^0 + (-3)^0 =$	(6 or 0 or 1 or 2)
10	$2^2 + 2 =$	(6 or 8 or 2^3 or 4^3)
11	$3^3 - 3^2 =$	(3 or 3^5 or 3^6 or 18)
12	$2^3 + 2^2 =$	(10 or 12 or 32 or 64)
13	$3^2 + 3^2 + 3^2 =$	(3^6 or 9^6 or 3^3 or 2^9)
14	$(-5)^2 + 5 =$	(5^2 or 20 or 15 or 30)
15	$(-1)^3 + (-1)^4 =$	(0 or -1 or 2 or -2)
16	$\frac{7^5}{7^4} + 1 =$	(7 or 1 or 8 or 7^2)
17	$(-2)^{20} \div 2^{15} =$	(2^5 or $(-2)^5$ or 2^{35} or $(-2)^{35}$)
18	$2^8 \div 2^4 =$	(2^{12} or 2^2 or 2×2^3 or 8)
19	If $3^5 \div 3^a = 3^0$, then $a =$	(4 or 5 or -5 or 0)
	$2^6 \times 2^2 =$	
20	(a) 2^3 (b) 2^4 (c) 2^8 (d) 2^{12}	
21	$(-5)^2 <$	
	(a) $(-2)^5$ (b) -5×2 (c) $-5 \times (-2)$ (d) 2^5	
22	$3^7 \div 3^7 =$	
	(a) zero (b) 1 (c) 3 (d) 7	
23	$3^2 + 3^2 + 3^2 =$	
	(a) 2^6 (b) 4^6 (c) 3^3 (d) 2^9	

24	$(-3)^2 = \dots$	(a) -9	(b) -6	(c) 6	(d) 9	
25	$2^3 + 2^2 = \dots$	(a) 2	(b) 8	(c) 16	(d) 32	
26	$(2)^6 + (-2)^4 = \dots$	(a) -2^{10}	(b) -2^2	(c) 2^2	(d) 2^{10}	
27	$(-10)^{\text{zero}} = \dots$	(a) -10	(b) -1	(c) 1	(d) 10	
28	$2^3 + 2^2 = \dots$	(a) 10	(b) 12	(c) 32	(d) 64	
29	$2^3 \times 2^3 = \dots$	(a) 2^6	(b) 4^9	(c) 4^6	(d) 2^9	
30	$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$	(a) $\frac{1}{32}$	(b) $\frac{1}{64}$	(c) $\frac{1}{128}$	(d) $\frac{1}{256}$	(with the same pattern)
31	$(-7)^2 \dots \mathbb{N}$					(\in or \notin or \subset or $\not\subset$)
32	The additive inverse of $(-3)^2$ is \dots					(9 or 3 or -3 or -9)
33	$(-9)^2 = \dots$					(-81 or -18 or 81 or 18)
34	$(-1)^8 + (-1)^9 = \dots$					(zero or -1 or 1 or 2)
35	$2^5 \times 2^2 = \dots$					(2^7 or 4^7 or 1)
36	$(-5)^2 \times (2)^2 = \dots$					(10^0 or 10 or $(10)^2$ or $(10)^3$)
37	$27 + (-3)^2 = \dots$					(-9 or 24 or 3 or 81)
38	$(-1)^3 + 2 = \dots$					(3 or -1 or -3 or 1)
39	$(5)^{\text{zero}} = \dots$					(zero or 5 or 1 or 50)
40	$3^5 + 3^2 = \dots$					(3^7 or 3^{10} or 3^3 or 3^2)
41	$9^2 \dots (-3)^4$					(> or < or = or \geq)
42	$(-100)^{\text{zero}} = \dots$					(-100 or 100 or zero or 1)
43	$9^7 + 9^5 = \dots$					(9^{-12} or 9^2 or 9^{zero} or 9^{35})
44	$(-19)^0 + (19)^0 = \dots$					(-1 or zero or 1 or 2)
45	$(-1)^{104} + (-1)^{103} = \dots$					(0 or 2 or -1 or 1)
46	$-9^3 \dots (-3)^2$					(< or = or > or \geq)
47	$(-1)^{12} + (-1)^{13} = \dots$					(0 or 1 or 2 or -1)

48	$5 \times 5^2 = \dots$	(25^2 or 25^3 or 5^2 or 5^3)
49	$(-1)^2 \times 2^3 = \dots$	(2^5 or 8 or -8 or -2^5)
50	$2^6 \times 2^4 = \dots$	(2^2 or 2^{12} or 2^{10} or 2^{24})
51	$(-1)^8 + (-1)^9 = \dots$	(zero or 1 or -1 or 2)
52	$(3)^7 \div (3)^4 = \dots$	($(3)^3$ or $(3)^5$ or $(3)^{11}$ or $(3)^2$)
53	$(-5)^2 \times (2)^2 = \dots$	(10^0 or 10 or 10^2 or 10^3)
54	$27 \div (-3)^2 = \dots$	(-9 or 24 or $3/7$ or 81)
55	$(-6)^2 = \dots - 12$	($>$ or $=$ or $<$ or \leq)
56	$2 - (-3)^0 = \dots$	(5 or 3 or 1 or 2)
57	The additive inverse of $(-3)^2$ is \dots	(9 or 3 or -3 or -9)
58	$\frac{1}{7^5} \times 7^5 = \dots 1$	($<$ or $=$ or $>$ or otherwise)
59	$2^5 \times 2^2 = \dots$	(2^7 or 2^4 or 2^3 or 1)
60	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}} = \dots$	(zero or -1 or 1 or 2)
61	$(-1)^{104} + (-1)^{103} = \dots$	(zero or -1 or 1 or 2)
62	$4^2 = \dots 8$	($>$ or $<$ or $=$ or otherwise)
63	The number of faces of the cube = \dots faces.	(6 or 8 or 12 or 4)
64	The area of a circle = \dots (πr or πr^2 or $2\pi r$ or $2\pi r^2$)	
65	The circumference of a circle = \dots (πr or $2\pi r$ or πr^2 or $2\pi r^2$)	
66	A circle, its radius length is 3.5 cm. , then the surface area = \dots cm^2 (Consider $\pi = \frac{22}{7}$) (El-Sharkia 2012) (11 or 22 or 38.5 or $38\frac{1}{8}$)	
67	A circle with radius length = 1 cm. , then its area = \dots cm^2 (Ismailia 2011) (π or 2π or $\frac{1}{2}\pi$ or π^2)	
68	The area of the circle whose diameter length is 8 cm. = \dots πcm^2 (El-Menia 2015) (4 or 8 or 16 or 64)	
69	A circle , its diameter length is 6 cm. , then its surface area = \dots cm^2 (Ismailia 2014) (3π or 6π or 9π or 36π)	
70	The circumference of a circle is 44 cm. , then the length of its diameter is \dots cm. (Consider $\pi = \frac{22}{7}$) (14 or 22 or 44 or 154)	
71	The perimeter of the opposite figure = \dots cm. (Souhag 2017) (2π or 5π or $\pi + 4$ or $4\pi + 4$)	

72	The area of the opposite figure = cm ² (16 π or 4 π or 2 π or 4 π^2)			
73	The lateral area of the cube = Area of one face \times (South Sinai 2013)			
74	(a) 2	(b) <u>4</u>	(c) 6	(d) 8
75	A cube of side length 4 cm. , then its lateral area = cm ² (Beni Suef 2012)			
76	(a) 32	(b) <u>64</u>	(c) 84	(d) 96
77	A cube of edge length 6 cm. , then its total area = cm ² (Cairo 2017)			
78	(a) 36	(b) 72	(c) 144	(d) <u>216</u>
79	If the perimeter of one face of a cube = 4 cm. , then its total area = cm ² (El-Dakahlia 2011)			
80	(a) 3	(b) 4	(c) 5	(d) <u>6</u>
81	The area of base of a cube is 49 cm ² , then its lateral area equals cm ² (A 4 / 7)			
82	(a) 392	(b) 294	(c) <u>196</u>	(d) 98
83	A cube of total area 150 cm ² , then the length of its edge is cm . (Luxor 2015)			
84	(a) 5	(b) 6	(c) 15	(d) 10
85	If the total area of a cube is 24 cm ² , then its volume = cm ³ (El-Fayoum 2012)			
86	(a) <u>8</u>	(b) 2	(c) 4	(d) 16
87	A cube its lateral area = 36 cm ² , then its volume = cm ³ (Souhag 2013)			
88	(a) <u>27</u>	(b) - 27	(c) - 1	(d) \emptyset
89	A cube, its volume is 1000 cm ³ , then its lateral area = cm ² (Damietta 2016)			
90	(a) 600	(b) 500	(c) <u>400</u>	(d) 200
91	A cube-shaped box , without a lid , has faces.			
92	(a) 4	(b) <u>5</u>	(c) 6	(d) 8
93	A cube without a lid of edge length 3 cm. , then its total area = (a) 54 (b) <u>45</u> (c) 36 (d) 9			

84	The area of one face of the cube = its total area. (Kafr El-Sheikh 2011)
	(a) $\frac{1}{2}$ (b) $\frac{1}{8}$ (c) $\frac{1}{6}$ (d) $\frac{1}{4}$
85	The lateral area of the cuboid = the perimeter of the base \times (Suez 2016)
	(a) height (b) width (c) length (d) volume
86	The lateral area of the cuboid with length is 3 cm. , width is 2 cm. and height is 4 cm. = cm ² (El-Beheira 2013)
	(a) 20 (b) 24 (c) 40 (d) 52
87	The lateral area of a cuboid with base in the shape of a square with side length 8 cm. and the height of the cuboid is 5 cm. = cm ²
	(a) 40 (b) 80 (c) 160 (d) 240
88	The total area of the cuboid with length is 12 cm. , width is 6 cm. and height is 4 cm. = cm ²
	(a) 216 (b) 36 (c) 360 (d) 288
89	The height of the cuboid whose lateral area is 120 cm ² and the dimensions of its base are 6 cm. and 4 cm. = cm. (El-Gharbia 2014)
	(a) 5 (b) 6 (c) 12 (d) 2.5
90	If the total area of a cuboid = 32 cm ² and its lateral area = 12 cm ² , then the area of one of its bases = cm ²
	(a) 32 (b) 20 (c) 18 (d) 10
91	The dimensions of a base of a cuboid are 4 cm. and 3 cm. and its lateral area = 140 cm ² , then its volume = cm ³
	(a) 1680 (b) 120 (c) 168 (d) 60
92	The circumference of the circle = $\times \pi$ (r or 2r or r ² or r+2)
93	The surface area of a circle = $\pi \times$ (r or r ² or 2r)
94	The sum of edge lengths of a cube is 84 cm. , then its lat equals cm ² 5 / 7
95	The height of the cuboid whose lateral area is 160 cm ² and the of its base are 3 cm. and 7 cm. equals cm.
	(6 or 8 or 10 or 16)
96	A cube the perimeter of its base is 36 cm. , then its lateral area = cm ²
	(9 or 324 or 36 or 486)
97	The area of the circle whose radius length is 2π cm. is cm ²
	(4 π or $2\pi^2$ or 12.56 or $4\pi^3$)

98	The L.S.A. of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm. is (<u>72 cm²</u> or <u>8.4 dm²</u> or <u>84 dm²</u> or <u>84 cm²</u>)
99	Half the T.S.A. of a cube whose sum of its edge lengths is 36 cm. is cm ² (<u>108</u> or <u>27</u> or <u>54</u> or <u>18</u>)
100	A circle , its circumference is 44 cm. , then the length of its radius = cm. ($\pi = \frac{22}{7}$) (<u>22</u> or <u>11</u> or <u>7</u> or <u>14</u>)
101	A cube of edge length 6 cm. , then its lateral area = cm ² (<u>216</u> or <u>180</u> or <u>144</u> or <u>108</u>)
102	The lateral area of the cube = Area of one face \times (<u>2</u> or <u>4</u> or <u>6</u> or height)
103	The lateral area of a cube whose side length is 3 cm. = cm ² (<u>27</u> or <u>48</u> or <u>36</u> or <u>54</u>)
104	If the radius length of a circle is 10 cm. , then its surface area = cm ² (Given that : $\pi = 3.14$) (<u>3.14</u> or <u>31.4</u> or <u>314</u> or <u>3140</u>)
105	If the edge length of a cube is 6 cm. , then its total area = cm ² (<u>24</u> or <u>36</u> or <u>144</u> or <u>216</u>)
106	The lateral surface area of the cube = area of one face \times (<u>6</u> or <u>5</u> or <u>4</u> or <u>3</u>)
107	The surface area of the circle = (π or <u>πr^2</u> or <u>$2\pi r$</u> or <u>$2\pi r^2$</u>)
108	A circle , its diameter length is 20 cm. , then its area = cm ² ($\pi = 3.14$) (<u>31.4</u> or <u>314</u> or <u>23.14</u> or <u>43.14</u>)
109	The sum of edge lengths of a cube is 24 cm. , then T.S.A. = cm ² (<u>16</u> or <u>36</u> or <u>4</u> or <u>24</u>)
110	If the total area of the cube = 54 cm ² , then the area of one face = cm ² (<u>4</u> or <u>5</u> or <u>8</u> or <u>9</u>)
111	The total area of the cube = Area of one face \times (<u>2</u> or <u>4</u> or <u>6</u> or <u>8</u>)
112	A circle , its radius length is 4 cm. , then its area = π cm ² (<u>4</u> or <u>8</u> or <u>12</u> or <u>16</u>)
113	The sum of edge lengths of a cube is 96 cm. , then its lateral area = cm ² (<u>8</u> or <u>64</u> or <u>256</u> or <u>384</u>)
114	The lateral area of a cuboid of length 3 cm. , width 2 cm. and height 4 cm. = cm ² (<u>20</u> or <u>24</u> or <u>40</u> or <u>52</u>)
115	A cube of edge length 6 cm. , then its total area = cm ² (<u>216</u> or <u>72</u> or <u>36</u>)
116	The area of the circle = $\times \pi$ (<u>r^2</u> or <u>$2r$</u> or <u>$6/7$</u>)
117	A cube of edge length 6 cm. , then its total area = cm ² (<u>36</u> or <u>72</u> or <u>144</u> or <u>216</u>)

118 A circle, its radius length is 4 cm. , then its area = π cm²
(8 or 16 or 64 or 2 π)

119 The total area of a cube is 324 cm² , then the area of face =
(54 cm² or 81 cm² or 54 cm. or 81 cm.)

120 The surface area of the circle whose diameter length is 20 cm.
= cm² (π = 3.14) (314 or 0.314 or 3.14 or 62.8)

121 If the lateral area of a cube is 36 cm² , then its total area = cm²
54

122 A circle , its circumference is 88 cm. , then its radius length = cm. (π = $\frac{22}{7}$)
(28 or 24 or 44 or 14)

123 A cube of edge length 6 cm. , then its lateral area = cm²
144

124 If the perimeter of base of a cube is 24 cm. , then its total area = cm²
(144 or 36 or 54 or 216)

125 The total area of cube = x area of one face
16 or 2 or 4 or 3)

Prim 6 April revision**Choose the correct answer from those given:**

1) $(-10)^{\text{zero}} = \dots$ (a) -10 (b) -1 (c) 1 (d) 10

2) $(-19)^0 + (19)^0 = \dots$ (-1, 0, 2, -2)

3) $- (3)^0 + 1 = \dots$ (-1, 0, 2, -2)

4) $(-3)^2 = \dots$ (a) -9 (b) -6 (c) 6 (d) 9

5) $(-2)^2 = \dots$ (-2, -4, -32, 2^2)

6) $(-5)^2 < \dots$ (a) $(-2)^5$ (b) -5×2 (c) $-5 \times (-2)$ (d) 2^5

7) $(-1)^3 + 1^3 = \dots$ (a) zero (b) 21 (c) -1 (d) 2

8) $2^3 + 2^2 = \dots$ (a) 10 (b) 12 (c) 32 (d) 64

9) $2^3 \times 2^2 = \dots$ (a) 2^6 (b) 4^9 (c) 4^6 (d) 2^5

10) $2^6 \times 2^2 = \dots$ (a) 2^3 (b) 2^4 (c) 2^8 (d) 2^{12}

11) $2^3 \div 2^2 = \dots$ (a) 2 (b) 8 (c) 16 (d) 32

12) $3^7 \div 3^7 = \dots$ (a) zero (b) 1 (c) 3 (d) 7

13) $(2)^6 \div (-2)^4 = \dots$ (a) -2^{10} (b) -2^2 (c) 2^2 (d) 2^{10}

14) $3^2 + 3^2 + 3^2 = \dots$ (a) 2^6 (b) 4^6 (c) 3^3 (d) 2^9

15) $3^5 + 3^5 + 3^5 = \dots$ (3^{15} , 3^6 , 9^5)

16) Double of the number $2^{10} = \dots$ (2^{20} , 4^{10} , 4^{20} , 2^{11})

17) Quarter of 4^{20} = $(4^{10}, 2^{20}, 4^{19})$

18) Quarter of 2^{12} = $(2^3, 2^{10}, 4^{20}, 2^8)$

19) $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$ $(a) \frac{1}{32} (b) \frac{1}{64} (c) \frac{1}{128} (d) \frac{1}{256}$

20) area of the circle = $(\pi r, \pi r^2, 2 \pi r, 2 \pi r^2)$

21) A circle its diameter 10 cm then its area = cm^2

$(10\pi, 5\pi, 25\pi, 15\pi)$

22) A circle its diameter length 8 cm , then its area = cm^2

$(8\pi, 64\pi, 16\pi^2, 16\pi)$

23) The area of the circle whose diameter length 7 cm = cm^2

$(49\pi, 49\pi^2, 14\pi, 12.25\pi)$

24) A circle its area is 616 cm^2 then its radius length is cm

$(14, 41, 15, 51)$

25) A circle its circumference is 44 cm then its diameter length is cm

$(14, 22, 44, 154)$

26) Cube with edge length 5cm the perimeter of its face =

$[21\text{cm}, 25\text{cm}, 50\text{cm}, 2\text{dm}]$

27) If the perimeter of one face of a cube is 4 cm then its total area=.... cm^2

$(3, 4, 5, 6)$



28) If the perimeter of one face of a cube = 8 cm then its total area = --- cm^2

(a) 30 (b) 24 (c) 54 (d) 60

29) The sum of lateral surface area and total surface area of cube

= $250 cm^2$ Then its volume = cm^3 [25, 125, 150, 100]

30) The T.S.A. of cube is $216 cm^2$, then area of one face = cm^2

(a) 63 (b) 36 (c) 45 (d) 54

31) In a cube the ratio between face area, lateral surface area, total

surface area = : : [1:2:3, 1:2:6, 1:4:6, 2:3:1]

32) The ratio between perimeter of one face of a cube and the sum of all

edges = : [2:3, 1:3, 3:2, 3:1]

33) The ratio between number of edges and number of vertices and

number of faces of cube = [8:6:12, 4:6:3, 6:4:3, 3:4:6]

34) Area of each face of a cube = total area $(\frac{1}{2}, \frac{1}{4}, \frac{1}{6}, \frac{1}{8})$

35) The lateral area of the cuboid with length = 3 cm, width = 2 cm and

height = 4 cm equals cm^2 (a) 20 (b) 24 (c) 40 (d) 52

36) A cuboid its total area is $140 cm^2$ and lateral area is $100 cm^2$ then its

base area = cm^2 (40, 30, 20, 10)



37) A case in the shape of a cube without led. Its lateral area = 20 cm^2 ,

then the area of the faces of the cube equals

(a) 5 cm^2 (b) 25 cm^2 (c) 30 cm^2 (d) 40 cm^2

38) If the perimeter of one face of a cube equals 12 cm . then its lateral

equals..... (a) 27 cm^2 (b) 36 cm^2 (c) 48 cm^2 (d) 54 cm^2

39) The height of a cuboid whose total area is 400 cm^2 , and its base is

squared form of the side length = 10 cm equals

(a) 4 cm (b) 5 cm (c) 10 cm (d) 12 cm

40) If each dimension of a cuboid is doubled in length then, the ratio

between its total area and the new total area equals.....

(a) $1 : 2$ (b) $1 : 4$ (c) $1 : 8$ (d) $1 : 16$

Prim 6 April revision**Choose the correct answer from those given:**

1) $(-10)^{\text{zero}} = \dots$ (a) -10 (b) -1 (c) 1 (d) 10

2) $(-19)^0 + (19)^0 = \dots$ (-1, 0, 2, -2)

3) $- (3)^0 + 1 = \dots$ (-1, 0, 2, -2)

4) $(-3)^2 = \dots$ (a) -9 (b) -6 (c) 6 (d) 9

5) $(-2)^2 = \dots$ (-2, -4, -32, 2^2)

6) $(-5)^2 < \dots$ (a) $(-2)^5$ (b) -5×2 (c) $-5 \times (-2)$ (d) 2^5

7) $(-1)^3 + 1^3 = \dots$ (a) zero (b) 21 (c) -1 (d) 2

8) $2^3 + 2^2 = \dots$ (a) 10 (b) 12 (c) 32 (d) 64

9) $2^3 \times 2^2 = \dots$ (a) 2^6 (b) 4^9 (c) 4^6 (d) 2^5

10) $2^6 \times 2^2 = \dots$ (a) 2^3 (b) 2^4 (c) 2^8 (d) 2^{12}

11) $2^3 \div 2^2 = \dots$ (a) 2 (b) 8 (c) 16 (d) 32

12) $3^7 \div 3^7 = \dots$ (a) zero (b) 1 (c) 3 (d) 7

13) $(2)^6 \div (-2)^4 = \dots$ (a) -2^{10} (b) -2^2 (c) 2^2 (d) 2^{10}

14) $3^2 + 3^2 + 3^2 = \dots$ (a) 2^6 (b) 4^6 (c) 3^3 (d) 2^9

15) $3^5 + 3^5 + 3^5 = \dots$ (3^{15} , 3^6 , 9^5)

16) Double of the number $2^{10} = \dots$ (2^{20} , 4^{10} , 4^{20} , 2^{11})

17) Quarter of 4^{20} = $(4^{10}, \underline{2^{20}}, 4^{19})$

18) Quarter of 2^{12} = $(2^3, \underline{2^{10}}, 4^{20}, 2^8)$

19) $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$ $(a) \frac{1}{32} (b) \frac{1}{64} (c) \frac{1}{128} (d) \frac{1}{256}$

20) area of the circle = $(\pi r, \underline{\pi r^2}, 2\pi r, 2\pi r^2)$

21) A circle its diameter 10 cm then its area = cm^2

$(10\pi, 5\pi, 25\pi, \underline{15\pi})$

22) A circle its diameter length 8 cm , then its area = cm^2

$(8\pi, 64\pi, 16\pi^2, \underline{16\pi})$

23) The area of the circle whose diameter length 7 cm = cm^2

$(49\pi, 49\pi^2, 14\pi, \underline{12.25\pi})$

24) A circle its area is $616\ cm^2$ then its radius length is cm

$(14, 41, 15, 51)$

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$[21\text{cm}, 25\text{cm}, 50\text{cm}, \underline{2\text{dm}}]$

27) If the perimeter of one face of a cube is 4 cm then its total area=.... cm^2

$(3, \underline{4}, 5, 6)$



28) If the perimeter of one face of a cube = 8 cm then its total area = --- cm^2

(a) 30

(b) 24

(c) 54

(d) 60

29) The sum of lateral surface area and total surface area of cube

$= 250 \text{ cm}^2$ Then its volume = cm^3

[25, 125, 150, 100]

30) The T.S.A. of cube is 216 cm^2 , then area of one face = cm^2

(a) 63

(b) 36

(c) 45

(d) 54

31) In a cube the ratio between face area, lateral surface area, total

surface area = .... : :

[1:2:3, 1:2:6, 1:4:6, 2:3:1]

32) The ratio between perimeter of one face of a cube and the sum of all

edges = :

[2:3, 1:3, 3:2, 3:1]

33) The ratio between number of edges and number of vertices and

number of faces of cube =

[8:6:12, 4:6:3, 6:4:3, 3:4:6]

34) Area of each face of a cube = total area

$(\frac{1}{2}, \frac{1}{4}, \frac{1}{6}, \frac{1}{8})$

35) The lateral area of the cuboid with length = 3 cm, width = 2 cm and

height = 4 cm equals cm^2

(a) 20 (b) 24 (c) 40 (d) 52

36) A cuboid its total area is 140 cm^2 and lateral area is 100 cm^2 then its

base area = cm^2

(40, 30, 20, 10)

37) A case in the shape of a cube without led. Its lateral area = 20 cm^2 ,

then the area of the faces of the cube equals

(a) 5 cm^2 (b) 25 cm^2 (c) 30 cm^2 (d) 40 cm^2

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equals..... (a) 27 cm^2 (b) 36 cm^2 (c) 48 cm^2 (d) 54 cm^2

39) The height of a cuboid whose total area is 400 cm^2 , and its base is

squared form of the side length = 10 cm equals

(a) 4 cm (b) 5 cm (c) 10 cm (d) 12 cm

40) If each dimension of a cuboid is doubled in length then, the ratio

between its total area and the new total area equals.....

(a) $1 : 2$ (b) $1 : 4$ (c) $1 : 8$ (d) $1 : 16$

summary

Circle

$$\text{Area} = \pi r^2$$

$$r = \sqrt{A \div \pi}$$

$$\text{Circumference} = 2 \pi r = D \pi$$

$$r = C \div (2 \pi)$$

$$r = \frac{\text{Diameter}}{2}$$

Volume of the cube = $s \times s \times s$

volume of cuboid = $L \times W \times H$

- 1) The equation is a mathematical sentence includes equality relation between them.
- 2) The Inequality is a mathematical sentence includes a sign on inequality between them.
- 3) The substitution set is to which the unknown of the symbols in the equation.
- 4) The solution set is the set of elements which verify
- 5) The ratio between L.S.A : T.S.A for the cube is $2 : 3$

In the cube :

L.S.A = area of 1 face x 4 or $s \times s \times 4$

$$\text{Area 1 face} = \frac{L.S.A}{4}$$

T.S.A = area of 1 face x 6 or $s \times s \times 6$

$$\text{Area 1 face} = \frac{T.S.A}{6}$$

In the cuboid :

a) L.S.A = Perimeter of base x height

b) T.S.A = L.S.A + (area of base x 2) with a lid

c) T.S.A = L.S.A + (area of base) without a lid

d) Perimeter of base = $\frac{L.S.A}{H}$

e) Height = $\frac{L.S.A}{\text{perimeter of base}}$

N Choose the correct answer from those given :

1 The sum of the edge length of a cube equals 108 cm its lateral area =.....
(124 , 86 , 27 , 324)

2 $\frac{5^7 \times (-5)^2}{5^6} = \dots$
(124 , 86 , 125 , 324)

3 If: $X = 2$ and $Y = -5$ Then the numerical value of
($3X + 2Y$) is (A) -4 (B) 4 (C) 14 (D) -3

4 $4 + (-6) > \dots$ (2 or 0 or -2 or -4)

5 $3^2 + 3^2 + 3^2 = \dots$ (2^6 or 4^6 or 3^3 or 2^9)

6 $2^3 \div 2^2 = \dots$ (2 or 8 or 16 or 32)

7 $(-3)^3 + (-3)^2 = \dots$ ($(-3)^5$ or $(-3)^6$ or (-18) or 18)

8 $(-1)^{104} + (-1)^{103} = \dots$ (zero or -1 or 1 or 2)

9 $\frac{6^2 \times 6^3}{6^4} = \dots$ (1 or 12 or 6^5 or 6)

10 If : $x = 1$, $y = -2$, then the negative number from the following is
($x + y^2$ or $x^2 - y$ or $x^2 + y$ or $x^2 + y^2$)

11 The equation : $x + 3 = 4$ is of the degree.
(first or second or third or fourth)

N (3)

N Choose the correct answer from those given :

1 The equation : $4x^3 - x = 29$ is of degree.

(first or second or third or fourth)

2 If : $x + 2 = 9$, $x \in \mathbb{Z}$, then the solution set is

($\{11\}$ or $\{-7\}$ or $\{7\}$ or \emptyset)

3 The solution set for the equation $x - 1 = 3$ in \mathbb{Z} is

($\{3\}$ or $\{-1\}$ or $\{4\}$ or $\{-3\}$)

4 The S.S. in \mathbb{N} of the equation : $2x - 1 = 5$ is

($\{3\}$ or $\{-3\}$ or $\{2\}$ or $\{\frac{1}{2}\}$)

5 If : $2x + 4 = 14$, then $x =$ (-2 or 2 or 3 or 5)

6 The equation : $x^2 + 3x = 4$ is of degree.

(first or second or third or fourth)

7 If : $x + 3 = 8$ such that $x \in \mathbb{Z}^-$, then the solution set of the equation is

($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

8 The solution set of the equation : $2x - 1 = -5$ in \mathbb{Z} is

($\{-2\}$ or $\{2\}$ or $\{-3\}$ or $\{3\}$)

9 If : $x + 2 = |-4|$, then $x =$ (-6 or -2 or 2 or 6)

10 If : $3x + 9 =$ zero, then the solution set of the equation at \mathbb{Z} is

($\{9\}$ or $\{-9\}$ or $\{3\}$ or $\{-3\}$)

11 If : $x - 3 < 1$, then x can be ((-1) or 4 or 5 or 6)

12 All the following numbers satisfy the inequality : $x > -3$ except

(zero or -1 or -2 or -4)

13 The number which satisfies the inequality : $x > -2$ is

(-1 or -2 or -3 or -4)

12 If : $2x + 5 > 3$, $x \in \mathbb{Z}$, then the solution set of the inequality is

(\mathbb{Z}^+ or \mathbb{N} or \mathbb{Z}^- or $\mathbb{N} - \{0\}$)

N Choose the correct answer from those given :

1 The set of solution of the inequality : $-1 \leq x < 1$ in \mathbb{Z} is
 $(\{-1, 0\} \text{ or } \{0, 1\} \text{ or } \{0\} \text{ or } \{1\})$

2 The set of solution of the inequality : $-2 < x \leq \text{zero}$ in \mathbb{Z} is
 $(\{-2, 0\} \text{ or } \{-1, 0\} \text{ or } \{0\} \text{ or } \{-2\})$

3 The solution set of the inequality $x > 0$ is
 $(\mathbb{Z} \text{ or } \mathbb{Z}^+ \text{ or } \mathbb{Z} \text{ or } \mathbb{N})$

4 The value of expression $3 \times (-5) - (2 \times 3)^2 \div 4 =$
 $(-31, -16, \frac{-15}{12}, -24)$

5 $2^3 \times 2^5 =$
 $(2^8, 2^{15}, 4^8, 4^{15})$

6 $(-2)^4 + (-3)^3 =$
(A) -43 **(B) 43** **(C) -11** **(D) 11**

7 $\frac{1}{7^5} \times 7^5 =$
(A) > **(B) <** **(C) <=** **(D) =**

8 If $X = 10$, $Y = -2$, then the negative number in the following is
a) $x^2 + y$ **b) $x + y^2$** **c) $x^2 - y$** **d) $x y$**

9 The area of the circle's surface =
 $(\pi r \text{ or } \pi r^2 \text{ or } 2\pi r \text{ or } 2\pi r^2)$

10 The circumference of the circle =
 $(\pi r \text{ or } 2\pi r \text{ or } \pi r^2 \text{ or } 2\pi r^2)$

11 The surface area of the circle of radius 1 cm. long = cm²
 $(\pi r \text{ or } 2\pi r^2 \text{ or } 2\pi r \text{ or } \pi)$

12 The area of the circle in which the length of its radius is 7 cm. =
 $(\text{where } \pi = \frac{22}{7}) \quad (49 \text{ cm}^2 \text{ or } 145 \text{ cm}^2 \text{ or } 154 \text{ cm}^2 \text{ or } 44 \text{ cm}^2)$

N Choose the correct answer from those given :

1 A circle its diameter is 6 cm. , then its surface area = cm²
(3π or 6π or 9π or 36π)

2 The lateral area of the cube = area of one face \times
(2 or 4 or 6 or 8)

3 The area of one face of a cube = its total area.
($\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{1}{6}$ or $\frac{1}{8}$)

4 A cube of edge length 2 cm. its total area = cm²
(8 or 20 or 24 or 18)

5 If the edge length of a cube is 3 cm. , then its lateral surface area = cm²
(12 or 15 or 36 or 54)

6 If the perimeter of one face of a cube = 4 cm.
, then its total area = cm²
(3 or 4 or 5 or 6)

7 If the area of base of cube is 49 cm² , then the lateral area equals cm²
(392 or 294 or 196 or 98)

8 A cube , its lateral area = 36 cm² , then its volume = cm³.
(27 or -27 or -1 or Ø)

9 If the total area of cube is 24 cm.² , then its volume = cm.³
(8 or 2 or 4 or 16)

10 The lateral area of the cuboid = the perimeter of the base \times
(height or width or length or volume)

11 The lateral area of the cuboid with length 3 cm. , width 2 cm. and height 4 cm. = cm²
(20 or 24 or 40 or 52)

12 The height of a cuboid whose lateral area 120 cm² and the dimensions of its base 4 cm. and 6 cm. equals cm.
(2.5 or 5 or 6 or 12)

N Complete the following :

1 The diameter length of a circle is 14cm so its area is

2 $(-11)^{\text{zero}} + (11)^{\text{zero}} = \dots$

$(-1)^{10} + (-1)^{11} = \dots$

3 $2^3 + 2^2 = \dots$

4 2, 3, 5, 8, 13, ..., ... (in the same pattern)

5 -2, -4, -6, -8, ..., ... (in the same pattern)

6 1, 1, 2, 3, 5, 8, ..., ... (in the same pattern)

7 3, -6, 12, -24, ..., ...

-7, -4, -1, ..., ...

8 $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \dots$ (in the same pattern)

9 The equation is a mathematical sentence includes relation between two sides.

10 The solution set of the equation $2x - 1 = -1$ is if the substitution set is $\{0, 1, 2, 3\}$

11 If $3x - 3 = 12$, then $x = \dots$ 5

12 If $(x + 1)$ is the additive inverse of (-2) , then $x = \dots$

13 If $|b - 1| = 7$, then $b = \dots$ or $b = \dots$

14 The greatest integer number which satisfies the inequality : $x < -3$ is

15 The previous integer for number $(x - 1)$ is

N Complete the following :

1 2 , 8 , 32 , 128 , ,

2 $\frac{(-7)^5 \times (-7)^2}{(-7)^6} = \dots \dots \dots$

3 $\frac{5^6 \times (-5)^7}{5^9} = \dots \dots \dots$

4 If $x + 3 = |-7|$ then $x = \dots \dots \dots$

5 The solution set of the equation $4x + 1 = 17$ where $x \in N$

6 A cube its edge is 4cm the total area = cm²

7 The number of edges of a cube = edges.

8 The lateral area of the cube = \times

9 The sum of the edges length of a cube equals 72 cm. , then the length of the edge equals cm.

10 The area of one face of a cube is 4 cm² , then its lateral area is cm²

11 A cube whose total area is 150 cm² , then its edge length = cm
FACE AREA = $150/6=25$

12 A cube of total area 600 cm² , then the length of its edge is cm.

13 If the volume of a cube is 1000 cm³ , then its total area = cm²

N Complete the following :

1 If: $x = 4$, $y = -5$, then $(2x + 3y) = \dots \dots \dots$

2 $-18, -12, -6, \dots \dots \dots$

3 $1, 4, 9, 16, 25, \dots \dots \dots$

4 The ratio between the area of one face of a cube and its lateral area = $\dots \dots \dots$

5 The lateral area of cuboid which has a squared base of side length 8 cm and its height is 4 cm = $\dots \dots \dots$

6 If the perimeter of one face of cube = 12 cm, then its total area = $\dots \dots \dots$

7 $(-1)^8 + (-1)^9 = \dots \dots \dots$

8 $\frac{1}{3}, \frac{1}{6}, \frac{1}{12}, \dots \dots, \dots \dots$

9 2, 8, 32, 128, $\dots \dots \dots$

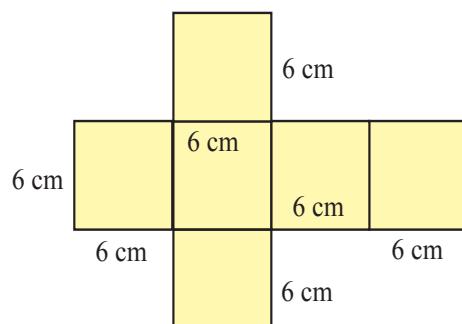
10 -6, -4, -2, $\dots \dots \dots$

11 When folding the opposite shape,

- The solid formed is $\dots \dots \dots$

- The lateral area of this solid is $\dots \dots \dots$

- The total area of this solid is $\dots \dots \dots$



12 If the lateral area of a cube is 36 cm^2 . Find its total area.

Choose the correct answer from those given :

the S.S. in N of the equation : $8x = 32$

1

({ 4 } or { -1, 0 } or { 0 } or { -2 })

the solution set of the equation in \mathbb{Z} : $2x + 3 = 9$

2

({ 4 } or { 3 } or { 0 } or { -2 })

Solve the following equation in \mathbb{Z} : $3x + 2 = -19$

3

({ 4 } or { -7 } or { 0 } or { -2 })

Solve the following equation : $(x + 3) + x = 27$, where $x \in \mathbb{Z}$

4

({ 12 } or { -7 } or { 0 } or { -2 })

Find the solution set of the equation : $5x + 3 = 3x + 5$ in \mathbb{Z}

5

({ 12 } or { -7 } or { 0 } or { 1 })

the S.S of $2(x + 3) = -2$ where $x \in N$

6

({ 11 } or { -7 } or { 7 } or \emptyset)

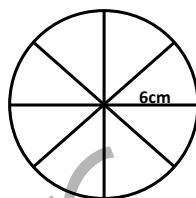
(10)

7 If the perimeter of one face of a cube equals 20 cm then its total area =.....

(124 , 127 , 150 , 199)

8 In the opposite figure A circle M of radius 6cm is divided in to 8 circular sectors equal in area Find the area of one sector

(124 , 14 , 14.14 , 199)



9 The perimeter of the base of cuboid is 32 its height = 10cm , the length of its base = 9cm THEN ITIS Total area. =.....

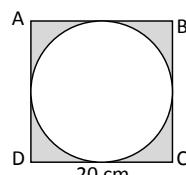
(124 , 446 , 14.14 , 320)

10 the result of $\frac{(-3)^{10} \times (3)^5}{3^{12}} = \dots$

(124 , 446 , 27 , 320)

11 In the opposite figure : ABCD is a square of side length 20cm. find the area of the shaded part in cm^2 ($\pi = 3.14$)

(124 , 86 , 27 , 320)



the Solution set for in Z

$3 - 2x = 17$

12

($\{11\}$ or $\{-7\}$ or $\{7\}$ or \emptyset)

13

($\{11\}$ or $\{-7\}$ or $\{7\}$ or \emptyset)

14

the value of $\frac{3^4 \times (-3)^5}{3^7} = \dots$

(12 , 446 , -9 , 320)

15

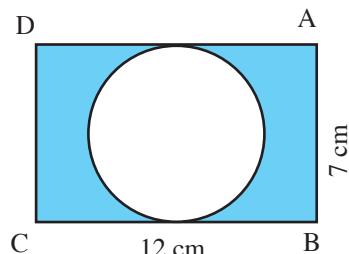
Number when added to triple output become 72 THEN the NUMBER =.....

(12 , 446 , -9 , 18)

16

In the opposite figure, ABCD is a rectangle its length 12 cm, its width 7 cm . A circle is drawn to touch the sides \overline{AD} and \overline{BC} . the area of the shaded part =..... where $(\pi \approx \frac{22}{7})$

(12.5 , 44 , 45 , 45.5)

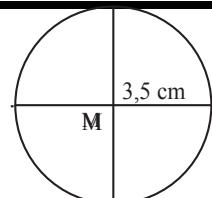


17

In the opposite figure, a circle M of radius 3.5 cm, is divided into

four equal circular sectors. THEN the surface area of one sector where $\pi \approx \frac{22}{7}$

=..... cm^2 (9.625 , 8.25 , 45 , 45.5)



The total area of a cube is 486 cm^2 . THEN the area of one face and its lateral area. =.....

(9.625 , 324 , 45 , 45.5)

18

A cuboid its length is 6 cm, its width is 4 cm, and its height is 8 cm. THEN its lateral area =.....

(160 , 324 , 45 , 688)

19

A room in the form of cuboid its inner dimensions are : 5 m length, 3.5m width and 3 m hight. It is wanted to paint its lateral walls. The cost price of one square meter is LE 9. THEN the required cost. =.....

(160 , 324 , 45 , 459)

20

If : $a > b$, c is a negative number , then $ac \dots bc$

21 (a) $<$ (b) \geq (c) $>$ (d) $=$

22 The age of Ahmed now is x years , then his age 5 years ago is years.

(a) $5x$ (b) $5 + x$ (c) $5 - x$ (d) $x - 5$

23

Ahmed's age 3 years ago was x , then his age now is years.

(a) $x + 3$ (b) $x - 3$ (c) $3 - x$ (d) $3x$

24

The solution set of the equation : $2x + 1 = -3$ in \mathbb{N} is

(a) {1} (b) {2} (c) {4} (d) \emptyset

25

If : $5x = 35$, then $2x + 1 =$

(a) 7 (b) 8 (c) 15 (d) 71

MATHEMATICS DEPARTMENT

GRADE 6

APRIL TEST MODEL 1

Choose the correct answer from those given :

1 $3^2 + 3^2 + 3^2 = \dots \dots \dots$ (2^6 or 4^6 or 3^3 or 2^9)

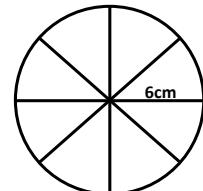
2 If : $x = 1$, $y = -2$, then the negative number from the following is
($x + y^2$ or $x^2 - y$ or $x^2 + y$ or $x^2 + y^2$)

3 The equation : $x + 3 = 4$ is of the degree.
(first or second or third or fourth)

4 The set of solution of the inequality : $-2 < x \leq \text{zero}$ in \mathbb{Z} is
($\{-2, 0\}$ or $\{-1, 0\}$ or $\{0\}$ or $\{-2\}$)

5 In the opposite figure A circle M of radius 6cm is divided in to 8 circular sectors equal in area Find the area of one sector

(124 , 14 , 14.14 , 199)



6 If the perimeter of one face of a cube equals 20 cm then its total area =.....
(124 , 127 , 150 , 199)

7 The value of expression $3 \times (-5) - (2 \times 3)^2 \div 4 = \dots \dots \dots$
(-31 , -16 , $\frac{-15}{12}$, -24)

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MATHEMATICS DEPARTMENT

GRADE 6

APRIL TEST MODEL 2

Choose the correct answer from those given :

1 $(-1)^{104} + (-1)^{103} = \dots \dots \dots$ (zero or -1 or 1 or 2)

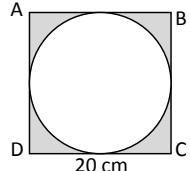
2 The equation : $4x^3 - x = 29$ is of degree.
(first or second or third or fourth)

3 If : $x + 2 = 9$, $x \in \mathbb{Z}$, then the solution set is
($\{11\}$ or $\{-7\}$ or $\{7\}$ or \emptyset)

4 The set of solution of the inequality : $-1 \leq x < 1$ in \mathbb{Z} is
($\{-1, 0\}$ or $\{0, 1\}$ or $\{0\}$ or $\{1\}$)

5 In the opposite figure : ABCD is a square of side length 20cm. find the area of the shaded part in cm^2 ($\pi = 3.14$)

(124 , 86 , 27 , 320)



6 The perimeter of the base of cuboid is 32 its height = 10cm , the length of its base = 9cm THEN ITIS Total area. =.....

(124 , 446 , 14.14 , 320)

7 If $X = 10$, $Y = -2$, then the negative number in the following is

a) $x^2 + y$ b) $x + y^2$ c) $x^2 - y$ d) $x y$

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APRIL TEST MODELS

Choose the correct answer from those given :

1 $(-19)^0 + (19)^0 = \dots \dots \dots$ (-1 or zero or 1 or 2)

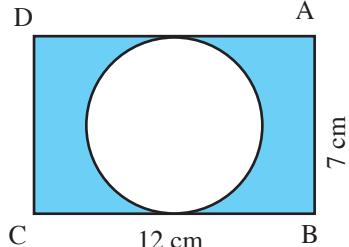
2 The solution set for the equation $x - 1 = 3$ in \mathbb{Z} is ({3} or { -1 } or {4} or { -3 })

3 The equation : $x^2 + 3x = 4$ is of degree. (first or second or third or fourth)

4 If : $2x + 5 > 3$, $x \in \mathbb{Z}$, then the solution set of the inequality is (\mathbb{Z}^+ or \mathbb{N} or \mathbb{Z}^- or $\mathbb{N} - \{0\}$)

5 In the opposite figure, ABCD is a rectangle its length 12 cm, its width 7 cm . A circle is drawn to touch the sides \overline{AD} and \overline{BC} . the area of the shaded part = where $(\pi \approx \frac{22}{7})$

(12.5 , 44 , 45 , 45.5)



6 The height of a cuboid whose lateral area 120 cm^2 and the dimensions of its base 4 cm. and 6 cm. equals cm.

(2.5 or 5 or 6 or 12)

7 $2^3 \times 2^5 = \dots \dots \dots$ (2^8 , 2^{15} , 4^8 , 4^{15})

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APRIL TEST MODEL 4

Choose the correct answer from those given :

1 $(-3)^3 + (-3)^2 = \dots$ ($(-3)^5$ or $(-3)^6$ or (-18) or 18)

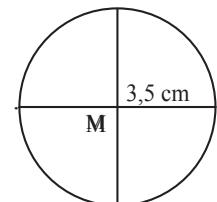
2 If : $x + 3 = 8$ such that $x \in \mathbb{Z}^-$, then the solution set of the equation is
..... ($\{-3\}$ or $\{5\}$ or $\{-5\}$ or \emptyset)

3 The number which satisfies the inequality : $x > -2$ is
..... (-1 or -2 or -3 or -4)

4 the S.S of $2(x + 3) = -2$ where $x \in \mathbb{N}$
($\{11\}$ or $\{-7\}$ or $\{7\}$ or \emptyset)

5 The lateral area of the cuboid = the perimeter of the base $\times \dots$
..... (height or width or length or volume)

6 In the opposite figure, a circle M of radius 3.5 cm, is divided into
four equal circular sectors. THEN the surface area of one sector where $\pi \approx \frac{22}{7}$
= cm² (9.625 , 8.25 , 45 , 45.5)



7 the S.S. in \mathbb{N} of the equation : $8x = 32$

($\{4\}$ or $\{-1, 0\}$ or $\{0\}$ or $\{-2\}$)

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APRIL TEST MODEL 5

Choose the correct answer from those given :

1 $2^3 \div 2^2 = \dots$ (2 or 8 or 16 or 32)

2 If : $3x + 9 = \text{zero}$, then the solution set of the equation at \mathbb{Z} is
({9} or {−9} or {3} or {−3})

3 If : $x - 3 < 1$, then x can be ((−1) or 4 or 5 or 6)

4 All the following numbers satisfy the inequality : $x > -3$ except
(zero or −1 or −2 or −4)

5 If the perimeter of one face of a cube equals 20 cm then its total area =
(124 , 127 , 150 , 199)

6 A circle its diameter is 6 cm. , then its surface area = cm²
(3π or 6π or 9π or 36π)

7 the solution set of the equation : $5x + 3 = 3x + 5$ in \mathbb{Z}
({ 12 } or { −7 } or { 0 } or { 1 })

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Remember that

- $(-a)^{\text{even}} = (a)^{\text{even}} \rightarrow (-3)^4 = (3)^4$
- $(-a)^{\text{odd}} = -(a)^{\text{odd}} \rightarrow (-3)^5 = -(3)^5$
- $(-1)^{\text{even}} = 1 \rightarrow (-1)^{100} = 1, \quad (-1)^{\text{odd}} = -1 \rightarrow (-1)^{99} = -1$
- $(a)^{\text{zero}} = 1, \text{ where } x \neq 0 \rightarrow (2)^0 = 1, \quad (-5)^0 = 1$
- $(-3)^0 + (3)^0 = 2$
- $(-1)^{99} + (-1)^{100} = 0$
- *Circumference of circle = $2\pi r$ or πd*
- $r = \frac{c.f.}{2\pi}$
- *Area of circle = πr^2*
- *L.A of a cube = the area of 1 face $\times 4 = e \times e \times 4$*
- *T.A of a cube = the area of 1 face $\times 6 = e \times e \times 6$*
- $\text{area of 1 face} = \frac{\text{L.A}}{4} \rightarrow e = \sqrt{\frac{\text{L.A}}{4}}$
- $\text{area of 1 face} = \frac{\text{T.A}}{6} \rightarrow e = \sqrt{\frac{\text{T.A}}{6}}$
- $\text{area of 1 face} : \text{L.A} = 1 : 4, \quad \text{Area of 1 face} : \text{T.A} = 1 : 6$
- $\text{L.A} : \text{T.A} = 4 : 6 = 2 : 3, \quad \text{T.A} : \text{l.A} = 6 : 4 = 3 : 2$
- *L.A of cuboid = perimeter of base \times height*
- *T.A of cuboid = L.S.A + (2 \times base area)*
- *T.A of cuboid without a lid = L.S.A + area of base*
- *Perimeter of base = L.S.A \div height*
- *Height = L.S.A \div perimeter of base*
- $\text{Area of base} = \frac{\text{T.A} - \text{L.A}}{2}$

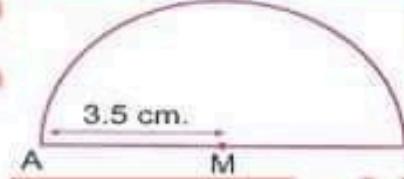
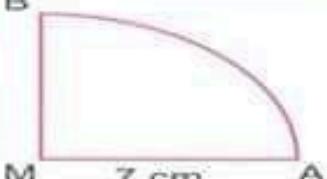
Choose the correct answer

1	<i>The surface area of the circle = (πr , πr^2 , $2\pi r$, $2\pi r^2$)</i>
2	$5 \times 5^2 = (25^2 , 25^3 , 5^2 , 5^3)$
3	$2^6 \times 2^2 \div 2^7 = (2^8 , 2^{12} , 2^5 , 2)$
4	<i>If the total area of a cube is 24 cm^2, then its volume = cm^3 (8 , 2 , 4 , 16)</i>
5	$(-3)^3 + (-3)^2 = ((-3)^5 , (-3)^6 , -18 , 18)$
6	<i>the additive inverse of $(-1)^{99}$ is (1 , 0 , -1 , 2)</i>
7	$\frac{7^5}{7^4} + 1 = (7 , 1 , 8 , 7^2)$
8	<i>A cube of total area 150 cm^2, then the length of its edge is Cm. (5 , 6 , 15 , 10)</i>
9	$(-3)^2 < ((1-2)^3 , 3^3 , 2^3 , (-3)^3)$
10	<i>A cube its lateral area = 36 cm^2, then its volume = cm^3 (27 , -27 , -1)</i>
11	$9^2 (-3)^4 (< , > , =)$
12	<i>A cube shaped box, without a lid, has Faces (4 , 5 , 6 , 8)</i>
13	<i>A cube of side length 4 cm, then its lateral area = cm^2 (32 , 64 , 84 , 96)</i>
14	$2^{11} \div 2^8 = (2 , 14 , 8 , 16)$
15	$(-5)^2 \times (2)^2 = ((10)^0 , 10 , (10)^2 , (10)^3)$
16	<i>The lateral area of a cube is 324 cm^2, then area of one face = (54 cm^2 , 81 cm^2 , 54 cm , 81 cm)</i>
17	$-4^2 16 (< , > , = , \leq)$
18	$(-4)^2 16 (< , > , = , \leq)$
19	<i>the area of the circle = $\times \pi$ (r , $2r$, r^2 , $r+2$)</i>

20	<i>the total of cube = × area of one face</i>	(6 , 2 , 4 , 3)
21	<i>The additive inverse of $(-5)^2$ is</i>	(25 , 5 , -5 , -25)
22	<i>If the area of one face of a cube is 9 cm^2, then its total surface area = cm^2</i>	(36 , 81 , 54 , 486)
23	$2^3 + 2^2 =,$	(10 , 12 , 32 , 64)
24	<i>the number of faces of the cube = faces</i>	(6 , 8 , 12 , 4)
25	<i>A cube, its volume is 1000 cm^3, then its lateral area = cm^2</i>	(600 , 500 , 400 , 200)
26	$(-11)^0 = N$	(∈ or C or ∉ or ∉)
27	<i>A circle its circumference is 88 cm, then its radius = cm.</i> $(\pi = \frac{22}{7})$	(28 , 24 , 44 , 14)
28	<i>A cube without a lid of edge length 3 cm., then its total area =</i>	(54 , 45 , 36 , 9)
29	<i>the lateral area of the cube = area of one face ×</i>	(6 , 5 , 4 , 3)
30	<i>A circle with radius length = 1 cm., then its area = cm^2</i>	(π , 2π , $\frac{1}{2}\pi$, π^2)
31	$2^5 \div 2^5 = 3 \dots$	(2 , 0 , 10 , 1)
32	<i>A circle whose radius length is 14 cm., then the surface area of this circle = cm^2 ($\pi = \frac{22}{7}$)</i>	(154 , 616 , 750 , 1386)
33	<i>The area of base of cube is 49 cm^2, then its lateral area = cm^2</i>	(392 , 294 , 196 , 98)
34	<i>The lateral area of a cuboid of length 3 cm., width 2 cm. and height 4 cm. = cm^2</i>	(20 , 24 , 40 , 52)
35	<i>a cube of edge length 6 cm. then its total area = cm^2</i>	(36 , 72 , 144 , 216)

36	$(-19)^{\text{zero}} + (19)^{\text{zero}} = \dots$	(-1 , 0 , 1 , 2)
37	$(-5)^3 \dots N$	(€ or C or £ or £)
38	<i>If the perimeter of one face of a cube = 12 cm., then its total area = cm²</i>	(9 , 45 , 54 , 36)
39	$4^2 \times 3^2 = \dots$	($(12)^0$, 12 , $(-12)^2$, $(12)^4$)
40	<i>the circumference of a circle is 44 cm., then the length of its diameter is cm</i>	$(\pi = \frac{22}{7})$ (14 , 22 , 44 , 154)
41	$(-1)^3 \dots (3)^{\text{zero}}$	(< , > , = , \leq)
42	<i>If the lateral area of a cube is 36 cm², then its total area = cm².</i>	(144 , 81 , 54 , 96)
43	<i>The circumference of the circle = (πr , πr^2 , $2\pi r$, $2\pi r^2$)</i>	
44	<i>the lateral area of a cuboid with base in the shape of a square with side length 8 cm and the height of the cuboid is 5 cm = cm²</i>	(40 , 80 , 160 , 240)
45	$(-1)^{104} + (-1)^{103} = \dots$	(zero , -1 , 1 , 2)
46	<i>the sum of edge lengths of a cube is 24 cm., then T.S.A = cm²</i>	(16 , 36 , 4 , 24)
47	<i>If $x = -1$, $y = 2$, then the negative number in the following is</i>	($x^2 + y^2$, $x + y$, $x^2 + y$, $x - y$)
48	<i>the total area of a cube is 324 cm² , then the area of face =</i>	(54 cm ² , 81 cm ² , 54 cm , 81 cm)
49	$-9^3 \dots (-3)^2$	(< , = , > , \geq)
50	<i>the sum of edge lengths of a cube is 96 cm., then its lateral area = cm²</i>	(8 , 64 , 256 , 384)
51	<i>A circle with radius length 7 cm., then its surface area = π cm².</i>	(7 , 14 , 21 , 49)

52	<i>the ratio between T.S.A and L.S.A of the cube is</i>	(2 : 3 , 3 : 4 , 2 : 3 , 1 : 2)
53	$3^2 + 3^2 + 3^2 = \dots$	(2^6 , 4^6 , 3^3 , 2^9)
54	<i>a cube the perimeter of its base is 36 cm., then its lateral area = cm²</i>	(9 , 324 , 36 , 486)
55	<i>the L.S.A of the cuboid whose dimensions are 3 cm. , 4 cm. and 0.6 dm is</i>	(72 cm^2 , 8.4 dm^2 , 84 dm^2 , 84 cm^2)
56	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}} = \dots$	(0 , -1 , 1 , 2)
57	<i>A circle of diameter length 10 cm., then its area = cm² ($\pi = 3.14$)</i>	(50 , 100 , 78.5 , 25)
58	<i>the additive inverse of $(-3)^0$ is</i>	(3 , -3 , 1 , -1)
59	<i>the ratio between the lateral surface area and the total surface area of a cube =</i>	(2 : 3 , 3 : 4 , 6 : 4 , 1 : 2)
60	<i>A circle of diameter length 8 cm., then its area = $\pi \text{ cm}^2$.</i>	(4 , 8 , 16 , 64)
61	<i>the ratio between the area of one face and the total area is</i>	(2 : 3 , 1 : 4 : 1 : 6 , 6 : 1)
62	<i>the total area of a cube = area of one face \times</i>	(4 , 5 , 6 , 8)
63	$(-100)^{\text{zero}} \dots -100$	($<$, $=$, $>$, \leq)
64	<i>The lateral area of cuboid = perimeter of the base \times (height , length , width , the base)</i>	
65	<i>the area of the circle whose radius length is $2\pi \text{ cm}$ is cm²</i>	(4π , $2\pi^2$, 12.56 , $4\pi^3$)
66	<i>if the base area of a cube = 49 cm^2 , then its lateral area =</i>	(294 , 196 , 9604 , 49)

67	$(-6)^2$ (-12)	$(> , < , = , \leq)$
68	<i>if the circumference of the circle is 88 cm, then its area = ($\pi = \frac{22}{7}$)</i>	<i>(88 , 616 , 44 , 28)</i>
69	<i>A cuboid with a square base, its lateral area is 224 cm^2, its height is 14 cm., then the side length of its base is cm.</i>	<i>(14 , 4 , 2 , 3)</i>
70	<i>the additive inverse of $(-7)^0$ is</i>	<i>(7 , 1 , -7 , -1)</i>
71	<i>the total area of the cuboid with length is 12 cm, width is 6 cm and height is 4 cm = cm^2</i>	<i>(216 , 36 , 360 , 288)</i>
72	$5^4 \div 5^m = 3^0$, then $m =$	<i>(4 , -4 , 3 , 0)</i>
73	 <i>the area of the figure = ($\pi = \frac{22}{7}$)</i>	 <i>the area of the figure = ($\pi = \frac{22}{7}$)</i>

Remember that

- $(-a)^{\text{even}} = (a)^{\text{even}} \rightarrow (-3)^4 = (3)^4$
- $(-a)^{\text{odd}} = -(a)^{\text{odd}} \rightarrow (-3)^5 = -(3)^5$
- $(-1)^{\text{even}} = 1 \rightarrow (-1)^{100} = 1, \quad (-1)^{\text{odd}} = -1 \rightarrow (-1)^{99} = -1$
- $(a)^{\text{zero}} = 1, \text{ where } x \neq 0 \rightarrow (2)^0 = 1, \quad (-5)^0 = 1$
- $(-3)^0 + (3)^0 = 2$
- $(-1)^{99} + (-1)^{100} = 0$
- *Circumference of circle = $2\pi r$ or πd*
- $r = \frac{c.f.}{2\pi}$
- *Area of circle = πr^2*
- *L.A of a cube = the area of 1 face $\times 4 = e \times e \times 4$*
- *T.A of a cube = the area of 1 face $\times 6 = e \times e \times 6$*
- $\text{area of 1 face} = \frac{\text{L.A}}{4} \rightarrow e = \sqrt{\frac{\text{L.A}}{4}}$
- $\text{area of 1 face} = \frac{\text{T.A}}{6} \rightarrow e = \sqrt{\frac{\text{T.A}}{6}}$
- $\text{area of 1 face} : \text{L.A} = 1 : 4, \quad \text{Area of 1 face} : \text{T.A} = 1 : 6$
- $\text{L.A} : \text{T.A} = 4 : 6 = 2 : 3, \quad \text{T.A} : \text{l.A} = 6 : 4 = 3 : 2$
- *L.A of cuboid = perimeter of base \times height*
- *T.A of cuboid = L.S.A + (2 \times base area)*
- *T.A of cuboid without a lid = L.S.A + area of base*
- *Perimeter of base = L.S.A \div height*
- *Height = L.S.A \div perimeter of base*
- $\text{Area of base} = \frac{\text{T.A} - \text{L.A}}{2}$

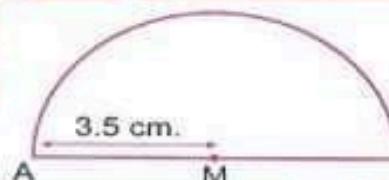
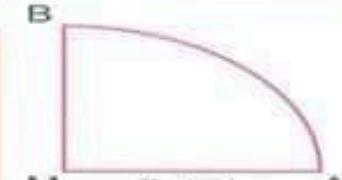
Choose the correct answer

1	<i>The surface area of the circle = (πr , πr^2 , $2\pi r$, $2\pi r^2$)</i>
2	$5 \times 5^2 = (25^2 , 25^3 , 5^2 , \underline{5^3})$
3	$2^6 \times 2^2 \div 2^7 = (2^8 , 2^{12} , 2^5 , \underline{2})$
4	<i>If the total area of a cube is 24 cm^2, then its volume = cm^3 (<u>8</u> , 2 , 4 , 16)</i>
5	$(-3)^3 + (-3)^2 = ((-3)^5 , (-3)^6 , \underline{-18} , 18)$
6	<i>the additive inverse of $(-1)^{99}$ is (<u>1</u> , 0 , -1 , 2)</i>
7	$\frac{7^5}{7^4} + 1 = (7 , 1 , \underline{8} , 7^2)$
8	<i>A cube of total area 150 cm^2, then the length of its edge is Cm. (<u>5</u> , 6 , 15 , 10)</i>
9	$(-3)^2 < ((1-2)^3 , \underline{3^3} , 2^3 , (-3)^3)$
10	<i>A cube its lateral area = 36 cm^2, then its volume = cm^3 (<u>27</u> , -27 , -1)</i>
11	$9^2 (-3)^4 (< , > , \underline{=})$
12	<i>A cube shaped box, without a lid, has Faces (4 , <u>5</u> , 6 , 8)</i>
13	<i>A cube of side length 4 cm, then its lateral area = cm^2 (32 , <u>64</u> , 84 , 96)</i>
14	$2^{11} \div 2^8 = (2 , 14 , \underline{8} , 16)$
15	$(-5)^2 \times (2)^2 = ((10)^0 , 10 , \underline{(10)^2} , (10)^3)$
16	<i>The lateral area of a cube is 324 cm^2, then area of one face = (54 \text{ cm}^2 , \underline{81 \text{ cm}^2} , 54 \text{ cm} , 81 \text{ cm})</i>
17	$-4^2 16 (< , > , = , \leq)$
18	$(-4)^2 16 (< , > , \underline{=} , \leq)$
19	<i>the area of the circle = $\times \pi$ (<u>r</u> , $2r$, r^2 , $r+2$)</i>

20	<i>the total of cube = × area of one face</i>	(<u>6</u> , 2 , 4 , 3)
21	<i>The additive inverse of $(-5)^2$ is</i>	(25 , 5 , <u>-5</u> , <u>-25</u>)
22	<i>If the area of one face of a cube is 9 cm^2, then its total surface area = cm^2</i>	(36 , 81 , <u>54</u> , 486)
23	$2^3 + 2^2 = ,$	(10 , <u>12</u> , 32 , 64)
24	<i>the number of faces of the cube = faces</i>	(<u>6</u> , 8 , 12 , 4)
25	<i>A cube, its volume is 1000 cm^3, then its lateral area = cm^2</i>	(600 , 500 , <u>400</u> , 200)
26	$(-11)^0 = N$	(<u>E</u> or <u>C</u> or <u>E</u> or <u>C</u>)
27	<i>A circle its circumference is 88 cm, then its radius = cm.</i> $(\pi = \frac{22}{7})$	(28 , 24 , 44 , <u>14</u>)
28	<i>A cube without a lid of edge length 3 cm., then its total area =</i>	(54 , <u>45</u> , 36 , 9)
29	<i>the lateral area of the cube = area of one face ×</i>	(6 , 5 , <u>4</u> , 3)
30	<i>A circle with radius length = 1 cm., then its area = cm^2</i>	(<u>π</u> , 2π , $\frac{1}{2}\pi$, π^2)
31	$2^5 \div 2^5 = 3 \dots$	(2 , <u>0</u> , 10 , 1)
32	<i>A circle whose radius length is 14 cm., then the surface area of this circle = cm^2 ($\pi = \frac{22}{7}$)</i>	(154 , <u>616</u> , 750 , 1386)
33	<i>The area of base of cube is 49 cm^2, then its lateral area = cm^2</i>	(392 , 294 , <u>196</u> , 98)
34	<i>The lateral area of a cuboid of length 3 cm., width 2 cm. and height 4 cm. = cm^2</i>	(20 , 24 , <u>40</u> , 52)
35	<i>a cube of edge length 6 cm. then its total area = cm^2</i>	(36 , 72 , 144 , <u>216</u>)

36	$(-19)^{\text{zero}} + (19)^{\text{zero}} = \dots$	(-1 , 0 , 1 , 2)
37	$(-5)^3 \dots N$	(€ or C or ₣ or ₧)
38	If the perimeter of one face of a cube = 12 cm., then its total area = cm ²	(9 , 45 , 54 , 36)
39	$4^2 \times 3^2 = \dots$	($(12)^0$, 12 , <u>$(-12)^2$</u> , $(12)^4$)
40	the circumference of a circle is 44 cm., then the length of its diameter is cm $(\pi = \frac{22}{7})$	(<u>14</u> , 22 , 44 , 154)
41	$(-1)^3 \dots (3)^{\text{zero}}$	(<u><</u> , <u>></u> , <u>=</u> , <u>\leq</u>)
42	If the lateral area of a cube is 36 cm ² , then its total area = cm ² .	(144 , 81 , <u>54</u> , 96)
43	The circumference of the circle = $(\pi r$, πr^2 , <u>$2\pi r$</u> , $2\pi r^2$)	
44	the lateral area of a cuboid with base in the shape of a square with side length 8 cm and the height of the cuboid is 5 cm = cm ²	(40 , 80 , <u>160</u> , 240)
45	$(-1)^{104} + (-1)^{103} = \dots$	(<u>zero</u> , -1 , 1 , 2)
46	the sum of edge lengths of a cube is 24 cm., then T.S.A = cm ²	(16 , 36 , 4 , <u>24</u>)
47	If $x = -1$, $y = 2$, then the negative number in the following is	($x^2 + y^2$, $x + y$, $x^2 + y$, <u>$x - y$</u>)
48	the total area of a cube is 324 cm ² , then the area of face =	(<u>54 cm²</u> , 81 cm ² , 54 cm , 81 cm)
49	$-9^3 \dots (-3)^2$	(<u>\leq</u> , <u>=</u> , <u>></u> , <u>\geq</u>)
50	the sum of edge lengths of a cube is 96 cm., then its lateral area = cm ²	(8 , 64 , <u>256</u> , 384)
51	A circle with radius length 7 cm., then its surface area = π cm ² .	(7 , 14 , 21 , <u>49</u>)

52	<i>the ratio between T.S.A and L.S.A of the cube is ...</i> <u>3 : 2</u>	(2 : 3 , 3 : 4 , 2 : 3 , 1 : 2)
53	$3^2 + 3^2 + 3^2 = \dots$	(<u>2^6</u> , <u>4^6</u> , <u>3^3</u> , <u>2^9</u>)
54	<i>a cube the perimeter of its base is 36 cm., then its lateral area = cm²</i>	(9 , <u>324</u> , 36 , 486)
55	<i>the L.S.A of the cuboid whose dimensions are 3 cm., 4 cm. and 0.6 dm is (72 cm² , 8.4 dm² , 84 dm² , <u>84 cm²</u>)</i>	
56	$(-1)^8 + (-1)^9 + (-1)^{\text{zero}} = \dots$	(0 , <u>-1</u> , <u>1</u> , 2)
57	<i>A circle of diameter length 10 cm., then its area = cm² ($\pi = 3.14$)</i>	(50 , 100 , <u>78.5</u> , 25)
58	<i>the additive inverse of $(-3)^0$ is (3 , -3 , 1 , <u>-1</u>)</i>	
59	<i>the ratio between the lateral surface area and the total surface area of a cube = (<u>2 : 3</u> , 3 : 4 , 6 : 4 , 1 : 2)</i>	
60	<i>A circle of diameter length 8 cm., then its area = π cm². (4 , 8 , <u>16</u> , 64)</i>	
61	<i>the ratio between the area of one face and the total area is (2 : 3 , 1 : 4 : <u>1 : 6</u> , 6 : 1)</i>	
62	<i>the total area of a cube = area of one face $\times \dots$ (4 , 5 , <u>6</u> , 8)</i>	
63	$(-100)^{\text{zero}} \dots -100$ (<u><</u> , <u>=</u> , <u>\geq</u> , <u>\leq</u>)	
64	<i>The lateral area of cuboid = perimeter of the base $\times \dots$ (<u>height</u> , length , width , the base)</i>	
65	<i>the area of the circle whose radius length is 2π cm is cm² (<u>4π</u> , <u>$2\pi^2$</u> , 12.56 , <u>$4\pi^3$</u>)</i>	
66	<i>if the base area of a cube = 49 cm² , then its lateral area = (294 , <u>196</u> , 9604 , 49)</i>	

67	$(-6)^2$ (-12)	$(\geq, <, =, \leq)$
68	if the circumference of the circle is 88 cm, then its area = $(\pi = \frac{22}{7})$	$(88, \underline{616}, 44, 28)$
69	A cuboid with a square base, its lateral area is 224 cm^2 , its height is 14 cm., then the side length of its base is cm.	$(14, \underline{4}, 2, 3)$
70	the additive inverse of $(-7)^0$ is	$(7, 1, -7, \underline{-1})$
71	the total area of the cuboid with length is 12 cm, width is 6 cm and height is 4 cm = cm^2	$(216, 36, 360, \underline{288})$
72	$5^4 \div 5^m = 3^0$, then $m =$	$(\underline{4}, -4, 3, 0)$
73	 the area of the figure = $(\pi = \frac{22}{7})$	 the area of the figure = $(\pi = \frac{22}{7})$